

BACTERIOLOGICAL NEWS

Society of American Bacteriologists

OFFICE OF THE
SECRETARY

DEPARTMENT OF BACTERIOLOGY
UNIVERSITY OF WISCONSIN
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1957 OFFICERS AND COUNCILORS

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C. A. Stuart	J. H. Bailey	J. R. Porter	Harry Eagle
Richard Donovanick (1957)	K. B. Raper (1958)	J. H. Hanks (1959)	

Invited Members (Nonvoting):

J. R. Porter, Editor-in-Chief, THE JOURNAL OF BACTERIOLOGY; P. W. Wilson, Editor-in-Chief, BACTERIOLOGICAL REVIEWS; H. B. Woodruff, Editor-in-Chief, APPLIED MICROBIOLOGY; R. D. Housewright, Chairman of the Program Committee; M. J. Foter, Director of the Employment Bureau; E. Staten Wynne, Chairman of the Division of General Bacteriology; W. S. Preston, Chairman of the Division of Medical Bacteriology, Immunology and Comparative Pathology; S. E. Hartsell, Chairman of the Division of Agricultural and Industrial Bacteriology; R. D. DeMoss, Chairman of the Division of Physiology.

FROM THE SECRETARY'S OFFICE

One of the delightful little prerogatives of the Secretary is editing the *News*. It would seem to follow, therefore, that the editor should be privileged to write an editorial once in a while. Your Secretary is sure none of his journalistic friends would admit this effort qualifies as an editorial in the strict sense, but at least it should serve as some sort of communication between the Secretary and the members. Communication in the reverse direction isn't so easy.

Judging from the number of inquiries received, it might be assumed that many members would like to know more about the workings and the problems of the Society. At the risk of boring the better informed, therefore, a few items of general interest will be discussed in this column from time to time. The subject today is money.

According to our Constitution the objectives of our Society are:

1. To promote scientific knowledge of bacteriology and related subjects through discussions, reports and publications;
2. To stimulate scientific investigations and their applications;
3. To plan, organize and administer projects for the advancement of knowledge in this field; and,
4. To improve professional qualifications.

Objectives 1 and 2 are furthered largely through our journals, our Annual Meeting and the activities of our local branches. Several committees are concerned with projects within the scope of object 3, while the American Academy of Microbiology, organized under the sponsorship of the Society, is vitally interested in professional qualifications of microbiologists.

In pursuing these objects our Society's operations have reached considerable size. In 1956, for example, our income from dues and the gross income of our publications aggregated about \$150,000. In addition, some income was realized from our Annual Meeting, from sale of miscellaneous publications, from use of our mailing list, and similar sources. One may logically wonder, then, what do we do with over \$150,000 per year?

Naturally the bulk of it is used to pay for publishing our journals. Other expenses include the costs of operating the Business Manager's office, the Secretary's office, the official expenses of committees and officers, publication of the program and proceedings of the Annual Meetings, publication of *Bacteriological News*, and many others. This year, for example, a new directory is being printed at an estimated cost of \$7,000. All of these expenditures are recorded in the annual report of the Secretary-Treasurer.

The backbone of our financial operations long has been our journals. The *Journal of Bacteriology* and *Bacteriological Reviews* are among the most

widely circulated biological publications in the world. For a long time a major share of the Society's operating costs was paid from journal income. In recent years, however, this income has been segregated into a "National Headquarters Fund," which is to be used when our Society has to pay for some of the services it has always received for nothing.

In accompanying columns our treasurer, Dr. John Hays Bailey, has written an analysis of the problems our publications are facing. Please read his words carefully. It will be evident that income from our journals has dropped off drastically in the past four years, not because of loss of subscribers but because of increased publishing costs without compensatory additional income. The thoughtful reader may rightly wonder:

1. Why have our journals been profitable over the years?
2. Why is their income falling off in these prosperous times?
3. What can we do to keep our journals solvent and productive?

Let's consider these one at a time.

Our journals have been supplied to the members at very reasonable rates. At present, \$8.00 of each member's dues is used to pay for his journals. If you want to know what they cost, look up the total expense of publication in the journal financial statement in the April, 1957, *Bacteriological News* and divide by the total number of subscribers. You'll find you're getting quite a bargain. But how can the journals be sold for \$8.00? The answer is simply because: (1) non-member subscribers pay \$14.00 per year; (2) income is derived from selling space to advertisers; and (3) the journals are partly subsidized by the employers of our editors—subsidy in the form of editors' time, free rent, light, heat, and other valuable services. If the Society didn't receive these subsidies, our journals would be in the red already. This arrangement can't last forever. The day can't be very far away when we'll have to pay for editorial services as many other societies are already doing.

Dr. Bailey's report clearly shows why the financial picture of our publications has suffered over the past few years. Our dues have remained constant while publication costs have steadily climbed. What can we do about it? One obvious and simple solution would be to increase the dues. It is unlikely that this suggestion would be met with thunderous applause from the membership or from non-member subscribers. Alternatively, one could simply print fewer pages. Under our present arrangement our journals cost almost \$50.00 per page. Eliminating pages would reduce costs rapidly. But who wants to do that? Even now the *Journal of Bacteriology* has only about three-tenths of a page per member, and publication of accepted manuscripts requires six to eight months.

Dr. Bailey lists things that have been done. The change from a single column to a double column format several years ago made it possible to publish more papers in the same space. This was a direct benefit to the members. The change to a machine coated paper in 1957 will save printing and mailing costs. But major reductions in publication costs can't possibly make up the ground we're losing.

The C.P.C. seriously considered this question at Detroit. It instructed the Publication Board to explore all possible means of reducing costs and increasing revenues. The Publication Board was charged to look into the possibilities of increased income from reprints and advertising, for example. It was instructed to consider the possibility of a "package deal" whereby our members might be offered a choice between our journals, as some societies do. And President Wilson plans to appoint a committee to look into all of our publishing agreements to see whether the Society has the best possible arrangement.

But there is still something every member of the Society can do—that is to find new members. All of you know the benefits of belonging to the S.A.B. Whether you know it or not, you're getting a real bargain when you pay \$8.00 for almost 2,000 pages of printed matter. Even if this is a bargain, the Society would still gain by an increase in membership. The reasons—editorial costs are the same

for 1 copy or 10,000. Typesetting, which represents a major portion of printing costs, also is the same regardless of the number of copies published. Therefore, the cost per subscriber would drop as the total number increased.

To simplify enrolling new members, an application blank is enclosed with this copy of the *News*. Find a prospective new member and persuade him to send in his application. Within three weeks he should receive acknowledgement from the Business Office and his journals should start coming promptly. If this does not occur, please suggest that he write the Business Manager, Mr. F. C. Harwood, Waverly Press, Inc., Mt. Royal and Guilford Avenues, Baltimore 2, Maryland, or have him write the Secretary, giving the facts about his application. Final action on the application is taken by the Council, which requires several months.

And now, a word about *Bacteriological News*. This is your publication. Currently it costs you approximately 70 cents each year or 17.5 cents per issue. Its editorial policy is exceedingly flexible and its pages are open to the membership. Each page costs about \$30.00 to publish and distribute. If you have news that you think will interest the membership, send it in. Similarly, if you have ideas on how the *News* can be improved, the Secretary will be glad to hear from you.

Report change of address, non-delivery of journals, routine inquiries, and similar matters to:

Mr. Francis C. Harwood
Business Manager, S.A.B.
Waverly Press, Inc.
Mt. Royal and Guilford Avenues
Baltimore 2, Maryland

Plan now to attend
The 58th Annual Meeting of
THE SOCIETY OF AMERICAN BACTERIOLOGISTS
Headquarters, Morrison Hotel, Chicago, Illinois
April 27 to May 1, 1958

SOCIETY AFFAIRS

THE 1957 MEETING

The Sheraton-Cadillac and Statler Hotels in Detroit were headquarters for the Society's fifty-seventh Annual Meeting. In addition to all its other excellent arrangements, the Local Committee provided a week of superb weather. Since the latter was promised in advance by one of the Local Committee chairmen, your Secretary is tempted to believe that the alternatives applicable to anyone having the temerity to predict the weather in Texas do not apply in the State of Michigan, or at least not in the vicinity of Detroit.

The Meeting was attended by 2354 registrants. Of these, 1337 registered as members, 377 as students, and 328 as non-members. The others were wives, guests, exhibitors, workmen, and press representatives. Evidently the "package deal" on the banquet was a success, because about 660 persons attended the annual banquet and toasted the Michigan Branch on its 40th anniversary.

Every state in the Union except Nevada was represented at the Meeting. Hawaii and Puerto Rico sent registrants, as did Canada and Mexico. Others came from the Netherlands, Denmark, Belgium, England, Scotland, Germany, Italy, Brazil and Japan.

Reports of Council Meetings

April 28, 1957. President Wilson called the first meeting of the Council to order at 2:00 p.m. He reported that the Council Policy Committee had met in Chicago on January 25, 1957, and approved several items that were to be presented to the Council later in the meeting. Then he called for reports of officers and committees.

1. Report of Publications Board. Chairman J. R. Porter referred to the reports of the Editors of the Society's journals published in the April, 1957, *Bacteriological News*. He also stated that the *Journal of Bacteriology* still has a sizeable backlog of unpublished papers. In 1956 arrangements were made with the Williams and Wilkins Co. for an allotment of 300 additional pages for the *Journal*. This extra space is being used to help reduce the accumulation of accepted papers.

The problem of lateness of publications also was introduced by Dr. Porter. He then asked Mr. Robert S. Gill, Chairman of the Board of the Williams and Wilkins Co., to address the Council on why the Society's publications have not been appearing on schedule. Mr. Gill explained very frankly that the printing company, Waverly Press, Inc., simply has more work than it can handle with its present facilities. This state of affairs has arisen because: (1) practically all journals printed

by Waverly Press have increased the number of pages and copies printed and increased the number of special issues and supplements; (2) advertisers are demanding more and more use of color, which increases the load on the printing presses; (3) many experienced printers have been lost from the Baltimore area to the Government Printing Office; and (4) the work-week of printers in the Baltimore area has been reduced from 40 to 37 and $\frac{1}{2}$ hours.

Mr. Gill listed steps being taken to get publications back on schedule. These include: (1) no new work of any kind is being accepted, and manufacturing schedules of other publications are being sacrificed to bring periodicals up to date; (2) printing work is being sublet when other printers will accept it; (3) processes other than letter-press are being used when feasible; (4) most departments of the printing plant are working overtime when it is practicable; (5) thirteen executives of the publishing and printing companies who have printing experience are working 10 hours per week each in the printing plant in addition to carrying on their usual duties; (6) facilities of the Easton, Md. printing plant will be increased by about 12 per cent by January 1958; and (7) new housing for the Williams and Wilkins Co. in Baltimore is being rushed to completion.

John Hays Bailey reported that Henry Scherp had agreed to accept appointment as Editor of *Bacteriological Reviews*. The Council approved Dr. Scherp's appointment for the usual five-year term beginning January 1, 1958.

Dr. Porter reported that the *Manual of Microbiological Methods*, prepared under the auspices of the Committee on Bacteriological Technique, is being published this summer or fall by McGraw-Hill Book Co. This book replaces the *Manual of Methods for Pure Culture Study of Bacteria*, long published in leaflet form by Biotech Publications.

2. Report of Director of Employment Bureau. M. J. Foter distributed a report to the Council (see elsewhere in this issue) and emphasized the critical shortage of persons with B.S. and M.S. degrees to fill the requests to the Employment Bureau from employers.

3. Program Committee. Chairman R. D. Housewright described the problems faced by the Program Committee and the local committees in scheduling the increasing numbers of papers submitted for presentation at the Annual Meeting. In 1957, for example, 477 papers were submitted, of which 456 were accepted. This number necessitated scheduling six concurrent sessions throughout the four days of the meetings. In most meeting places it is difficult to find enough rooms of adequate size

to accommodate this number of sessions at the same time.

At this point President Wilson explained that he had appointed a committee to study problems connected with our Annual Meeting. Initially the committee consists of Orville Wyss, Chairman, R. D. Housewright, T. C. Stadtman, and W. J. Nungester. In view of the steady increase in number of papers being submitted (see elsewhere in this issue), it may be necessary to (1) increase the length of our meetings; (2) limit the number of papers that can be accepted; or (3) meet only in certain cities where there are adequate facilities. The committee was asked to consider these and possibly other alternatives, and report its recommendations to the Council by the 1958 meeting.

4. Local Committee for 1958 Meeting. After President Wilson described the circumstances surrounding the change in meeting place from Purdue University to Chicago (see *Bacteriological News*, April, 1958), J. C. McCaffrey, Chairman of the Local Committee, explained that his committees are making good progress in preparations for the April 27-May 1, 1958, date at the Morrison Hotel in Chicago.

5. Committee on International Geophysical Year. R. H. McBee described his experiences during a three-month reconnaissance mission to Antarctica last winter. He believed worthwhile microbiological work could be done there, but emphasized the difficulties of getting to and from the area and of working while there. Dr. McBee urged that any microbiologists sent to the Antarctic should be part of a team of biologists in which some degree of coordination could be accomplished. (Further consideration of Dr. McBee's recommendations was deferred until the next meeting of the Council on April 30, 1957.)

6. Treasurer's report. John Hays Bailey referred to the financial statement published in *Bacteriological News* (April, 1957). He pointed out the fact that although the Society had a balance of \$132,015.05 on December 31, 1956, most of this money was in the following categories:

- (1) National Headquarters fund. This fund was started many years ago to serve the Society when it is forced to establish central executive and editorial offices. The fund has been built up entirely from profits on publications and income from investments—not from members' dues.
- (2) Dues paid in advance. This money will be used to pay subscription and operating costs during 1957.
- (3) Reserves to cover the cost of the 1957 Directory, to pay 1956 income tax (see elsewhere in this issue), to pay attorney's fees, and to cover several smaller items of anticipated expense.

In response to a question, Dr. Bailey reported

that a decision on our appeal from an earlier ruling by the Internal Revenue Service to the effect that the Society is a taxable corporation had been promised in the near future. (See elsewhere in this issue for outcome of the decision.)

The Council approved the following budget proposed by Dr. Bailey for 1957:

Income

Dues, Active 4927 × \$12.00	\$59,124.00
Sustaining 73 × \$75.00	5,475.00
5000	\$64,599.00

Expenses

Subscriptions (5000 × \$8.00)	\$40,000.00
Bacteriological News	3,600.00
Managerial Service	7,400.00
Taxes	7,000.00
Secretary's Office	
Secretarial Assistance (\$3600)	
Society Expenses (\$2700)	6,300.00
Treasurer's Office	100.00
Committee on Visual Instruction	100.00
Surplus	99.00
	\$64,599.00

7. Secretary's report. Reference was made to the report of the Secretary-Treasurer as published in the April, 1957, issue of *Bacteriological News*. The report was approved by the Council. The Secretary also remarked that a new Directory of the Society is being prepared for publication in the Fall of 1957.

On a call for new business from President Wilson, the following actions were taken:

1. J. R. Porter proposed that the Society apply for affiliate status in the American Institute of Biological Sciences. After reviewing the activities of the A.I.B.S., and pointing out where he thought affiliate membership would be beneficial to both the Society and A.I.B.S., Dr. Porter moved that the Society apply for affiliate membership and that our contribution be \$200 per annum. He suggested that the matter be re-examined in three years. The motion was passed by the Council.

2. A. E. Feller reported on the activities of the Virginia Branch in trying to stimulate interest in bacteriology by offering a prize for the winning exhibit on microbiology at the Virginia Junior Academy of Science meeting each year (see *Bacteriological News*, January, 1957).

After several other councilors indicated considerable interest in developing future microbiologists, John Hays Bailey proposed that the Society offer a suitable citation or plaque to the school or individual who sponsors a high school or junior high school pupil who wins a prize for a microbiology project or exhibit in a science fair or con-

test held under the auspices of one of our local branches or any state academy of science. The Council approved.

3. President Wilson brought up the question of how the Society could help in raising funds to send invited speakers to the Seventh International Congress for Microbiology in Stockholm, Sweden, in 1958. He mentioned that agencies that grant funds for travel of this type are more likely to be sympathetic to requests from individuals whose professional societies are also offering help. Dr. I. C. Gunsalus reported that members of the American Society of Biological Chemists assess themselves \$1.00 per year to provide a fund to help defray the cost of younger biochemists attending international meetings. After considerable discussion, J. H. Hanks proposed that the members of the Society be asked whether they would be willing to assess themselves a sum of \$0.50 to help send American bacteriologists who are invited to be on the program of the Stockholm meeting. Further consideration of this question was deferred until the next meeting of the Council on April 30th.

4. The Secretary read an invitation from the Ohio Branch to the Society to meet in Cleveland in 1963. The invitation was referred to the Committee on Meeting Places with instructions to examine the facilities in Cleveland and decide whether they would be satisfactory for the Society's needs.

The Council recessed until 2:00 p.m. on Tuesday, April 30th.

April 30, 1957. President Wilson re-convened the Council at 2:00 p.m. and called for further reports of committees and representatives.

1. Stuart Mudd, Society representative to the International Association of Microbiological Societies, reported on arrangements for the Seventh International Congress for Microbiology. He explained that a tentative limit of 1,000 has been placed on the number of participants in the Congress, and said he had been informed that the American quota would be something like 400. Individuals wishing to participate in the program can obtain the necessary application forms and instructions by writing the SAB Business Manager, Mr. F. C. Harwood, The Waverly Press Inc., Mt. Royal & Guilford Avenues, Baltimore 2, Maryland. Applications will be screened by the SAB Program Committee, which will forward its recommendations to the International Committee. Following a discussion of arrangements, the Council's attention was again directed to the proposed \$0.50 assessment to help cover the travel expenses of American bacteriologists participating in the program. Richard Donovan moved "that the Council of the SAB instruct the Secretary to place on the next mail ballot to the membership a referendum on which the members can vote by mail. The referendum would be to the effect that a

\$0.50 assessment shall be made per member for one year. If approved, the money thus collected would go toward aiding in the traveling expenses of members of the Society who are invited to participate in the International Congress for Microbiology to be held in Stockholm in 1958." After a short discussion, the motion was approved by the Council. It was emphasized that this was an assessment for one year only.

2. H. O. Halvorson explained the objectives of the American Academy of Microbiology to the Council. He expressed the hope that the Academy will be a professional organization having stature and dignity. Membership in the Academy will indicate excellence in the field of Microbiology. Dr. Halvorson emphasized that the Academy is a professional, not a scientific, organization. It will not publish scientific papers and in this way compete with the Society.

Following this report, President Wilson discharged the Committee of Twenty, the committee that organized the Academy.

3. C. F. Niven, Jr. reported for the Committee on Taxonomy. He mentioned particularly the activities of the Subcommittee on Taxonomy of the Actinomycetes. Among other things it has done, this Committee has raised a fund of about \$22,000 in contributions from industry to be used to support research on taxonomy of actinomycetes. In connection with Dr. Niven's report, the question was raised as to whether the Society should be in the position of receiving funds to support research in this way, and thus act as a "research foundation." After considerable discussion, President Wilson said he would appoint a committee to recommend to the Council how the Society can handle these funds to avoid tax problems and other complications of acting as a research agency.

4. The Council approved a motion to suggest the name of C. F. Niven, Jr. to replace K. B. Raper on the Board of Trustees of *Bergey's Manual*. Dr. Raper asked to be relieved because he is out of the U.S. for several months.

5. Chairman R. L. Starkey reported on the activities of the President's Fellowship Committee (see full report elsewhere in this issue). Dr. Starkey also asked for Council consideration of the policies that were being followed by his Committee in acting upon requests for President's Fellowship funds. He explained that his Committee has been considering only those requests that involve travel to obtain training that is specifically useful in the individual's research. It has been rejecting requests that would involve travel and participation in formal courses in microbiology. After considerable discussion, the Council approved the policy now being followed by the Committee by passing a vote of confidence.

6. Richard McBee, reporting further on the ac-

tivities of the Committee on the International Geophysical Year, made two suggestions.

- (1) The Society should request the aid of the A.I.B.S. in furthering the Committee's plans for additional work in the Antarctic and particularly toward organizing an integrated biological research program that would include microbiologists.
- (2) A limited number of samples could be brought back by microbiologists working in the Antarctic. Interested individuals could arrange with the Committee on the I.G.Y. to have samples sent to them.

Finally, Dr. McBee moved that the Society request the A.I.B.S. to support the efforts of the I.G.Y. Committee; the motion was approved by the Council.

7. The Secretary described a request from the International Cooperation Administration that the Society enter a contract with the I.C.A. to permit foreign members to join the Society. In effect, the arrangement would be: The I.C.A. would supply the names of individuals they have brought to this country for training and who would like to be enrolled in the Society. These individuals would, of course, have to meet the usual requirements for membership. The individual would pay a nominal portion of his dues and the remainder would be paid by the I.C.A. The Contract was approved by the Council Policy Committee with instructions to the Secretary to ask for a sum additional to the regular dues to cover the extra postal charges incurred in sending the journals to foreign countries. The Council approved the action of the C.P.C.

8. The Council approved a motion that the Director of the Society's Employment Bureau be made a non-voting member of the Council.

9. The invitation of the Missouri Valley Branch to the Society to meet in Kansas City in 1962 and the invitation of the Ohio Branch to meet in Cleveland in 1963 were accepted by the Council, subject to the provision that the Committee on Meeting Places is satisfied that the facilities of the two cities are adequate for our meetings.

The meeting adjourned at 3:35 p.m.

Report of the Business Meeting

(May 2, 1957)

President Wilson opened the meeting with a call for reports of officers and other interested individuals. He referred to the report of the Secretary-Treasurer, as published in the April, 1957, issue of *Bacteriological News*. J. R. Porter reported on the activities of the Publications Board and H. O. Halvorson made a statement on the aims and purposes of the American Academy of Microbiology. These reports have been described in the reports of the Council meetings. Next John Hays Bailey de-

scribed the status of the Society's income tax hearing.

The Secretary described the main actions of the Council during its 1957 meetings. The only item not covered in the reports of the Council meetings dealt with a recommendation of the Council Policy Committee to the Program Committee concerning the program for the 1958 meeting. These recommendations were based on the crowded program in 1957 and represented an attempt to provide guidance to the Program Committee. The recommendations were: (1) the meeting should extend from Sunday afternoon through Thursday afternoon; (2) the number of papers should be limited to 400, any necessary reductions from the total number submitted to be assessed proportionally against all divisions; (3) the Business Meeting should be scheduled on Wednesday afternoon and the Banquet, if any, on Wednesday evening; (4) the Program Committee was encouraged to continue its emphasis on the scheduling of symposia and round tables.

Following the reports of the officers, S. E. Hart-sell read the following report of the Committee on Resolutions:

"Mr. President, the Committee on Resolutions presents the following:

1. WHEREAS, During the past year certain members of our Society have become deceased, and

WHEREAS, these members endeared themselves to the membership by their wise counsel, their unending inspiration and their example, and

WHEREAS, among this number were included Dr. Charles Edward Amory Winslow, a Charter member of this Society, a former President of it who served with great distinction, and who helped to sponsor the *Journal of Bacteriology*, and who was its first Editor, and who always gave unstintingly of his time and his energies, and who is remembered with affection and gratitude for his dedicated service to bacteriology and to public health, and WHEREAS, the passing of Dr. James Morgan Sherman, one who was recognized as a distinguished scientist, a devoted servant in the several offices of this Society, a very able Editor-in-Chief of the *Journal of Bacteriology*, and a man whose humble humanity and work for the Society cannot be replaced and will be long remembered, and

WHEREAS, the death of Dr. Robert Breed took from us a capable scientist, a guiding spirit in determinative bacteriology and in classification, and whose contributions in the field of dairy bacteriology are well known.

WHEREAS, the Society recognizes the contributions made by these persons in teaching, in investigation and in leadership.

Be It Resolved, therefore, that the Society of American Bacteriologists in its annual meeting of 1957 should pay tribute to all its deceased members and should record its indebtedness to them in the minutes of this meeting.

2. WHEREAS, the high quality and the effectiveness of the scientific program of this Society is dependent to a great extent upon the perception of, and the organization and execution of, the respective activities by our officers and by the members who serve on the committees and boards, and,
WHEREAS, the Office of Naval Research and the American Institute of Biological Sciences cooperated most effectively with the Program Committee in arranging for our guest lecturer, Dr. D. A. A. Mossel of Utrecht, The Netherlands, whose informative presentations added much to this meeting,
WHEREAS, the continuing interest of the Eli Lilly Company and the Difco Laboratories with their annual awards catalyses the development of young scientists and recognizes their achievements.

WHEREAS, the past year marks the activation of the American Academy of Microbiology which effort represents the fruition of the work of several committees within the Society,

WHEREAS, Dr. John Hays Bailey has given many years of loyal, unselfish service as Secretary of this Society, and his efforts have led to effective coordination and development of this office in the improvement of the operations of the Society.

Be It Resolved, therefore, that we should express our gratitude to these members and groups for their continuing, efficient and dedicated service.

3. WHEREAS, the Michigan Branch has provided excellent facilities for this meeting, including an improved registration and ticket procurement system, comfortable and well-managed rooms for sessions, symposia and meals,
Be It Resolved, therefore, that the Society should now express its sincere gratitude to the Michigan Branch, its committees and to other individuals for their generous hospitality and who in a large measure made possible such a profitable and enjoyable meeting.

Respectfully submitted,

I. C. GUNSALUS

C. A. HUNTER

S. E. HARTSELL, *Chairman*

No new business was proposed and the Meeting adjourned at 3:15 p.m.

INCOME TAX DECISION

Most members will recall the decision of the Internal Revenue Service in 1954 that the Society's income was taxable. On the advice of legal counsel, taxes have been paid since that time under protest and an appeal was made from the original ruling.

On May 6, 1957, less than a week after our Annual Meeting in Detroit, a favorable decision on the appeal finally was announced in the following letter:

U. S. TREASURY DEPARTMENT

Washington 25

May 6, 1957

Society of American Bacteriologists
Sterling Winthrop Research Institute
Rensselaer, New York

ATTENTION: John Hays Bailey
Secretary-Treasurer

Gentlemen:

This is in further reply to the protest and additional information submitted on your behalf by Eben F. Perkins, attorney at law, relative to our ruling dated June 30, 1954, wherein it was held that you were not entitled to exemption from Federal income tax under the provisions of section 101(6) of the Internal Revenue Code of 1939 which corresponds to section 501(c)(3) of the 1954 Code.

A careful review of all the evidence on file discloses that you were incorporated on March 25, 1947, under the laws of the District of Columbia, the successor of an organization with the same name, incorporated under the laws of the State of Indiana, in 1920, and dissolved December 8, 1947. Your purposes, as stated in your articles of incorporation, are to promote scientific knowledge of bacteriology and related subjects through discussions, reports and publications, to stimulate scientific investigations and their applications, to plan, organize and administer projects for the advancement of knowledge in this field and to improve professional qualifications.

Your membership consists of the following classes, members and emeritus members, corresponding members, honorary members and sustaining members. Any person interested in the objects of your organization is eligible for election as a member. Any person or organization interested in the objects of your organization is eligible for election as a sustaining member. The number of all classes of members is limited only by eligibility, except that the number of corresponding members shall not exceed fifty and not more than five corresponding members and not more than one honorary member may be elected during any one year.

Your activities consist of holding a regular annual meeting for the presentation of scientific

papers, exhibits and the exchange of views and knowledge and the publishing and sale of journals, periodicals and news letters under publishing agreements with The Williams and Wilkins Company, a commercial printing organization. Such published journals, periodicals and news letters are designed to inform your members of the affairs of your organization, such as annual meetings, meetings of local branches, election of officers, annual reports of standing committees and officers and to distribute information gathered in the field of bacteriology and related subjects. Subscriptions to the periodicals and journals are received from members and non-members. However, subscription rates to non-members are at an increased rate.

Your income is derived from dues of members, fees from exhibitors at your annual meetings and profits on sales of journals and periodicals. Such funds are expended for general maintenance and operating expenses in carrying out your stated purposes.

From the information before us, it is clear that a substantial number if not all your members are individuals and commercial organizations connected in some phase of bacteriology or the same general field.

Section 501(c) of the 1954 Code, describes certain organizations exempt from Federal income tax under section 501(a) and reads, in part, as follows:

"(3) Corporations, and any community chest, fund or foundation, organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual, no substantial part of the activities of which is carrying on propaganda, or otherwise attempting, to influence legislation, * * *."

* * *

"(6) Business leagues, chambers of commerce, real-estate boards, or boards of trades, not organized for profit and no part of the net earnings of which inures to the benefit of any private shareholder or individual."

Careful consideration has been given to all the information submitted and it is our opinion based upon the facts as set forth above that while some of your activities and operations are of an educational and scientific nature you are not the public type of organization contemplated by section 501(c)(3) inasmuch as you are an association of individuals in a particular profession and your activities and operations are directed for the most part, toward the betterment and improvement of the profession and the business interests of your members rather than the general public.

Based upon the foregoing, it is held that you are

not entitled to exemption from Federal income tax under the provisions of section 501(c)(3) of the 1954 Code.

It follows, therefore, that contributions made to you are not deductible by the donors in computing their taxable income as provided by section 170 of the 1954 Code.

However, it has been concluded, based upon the information submitted, that you are exempt from Federal income tax as an organization described in section 501 (c)(6) of the Internal Revenue Code of 1954. (Italics mine. Ed.)

Accordingly, you will not be required to file income tax returns unless you change the character of your organization, the purposes for which you were organized, or your method of operation. Any such changes should be reported immediately to the District Director of Internal Revenue, Albany, New York, in order that their effect upon your exempt status may be determined.

You are required, however, to file an information return, Form 990, annually, with the District Director of Internal Revenue, Albany, New York, so long as this exemption remains in effect. This form may be obtained from your District Director and is required to be filed on or before the fifteenth day of the fifth month following the close of your annual accounting period.

Our ruling dated June 30, 1954, is hereby modified to conform to this ruling.

The District Director of Internal Revenue, Albany, New York, is being advised of this action.

Very truly yours,

(signed) P. HENRY NEEDHAM
Chief, Pensions and
Exempt Organizations Branch

Our attorneys have been asked to give an opinion of the meaning and significance of the finding announced above. The results of this request are recorded in the following letter from Mr. Eben F. Perkins:

Law Offices
PERKINS & RICH
Baltimore 2, Maryland

June 25, 1957

Dr. E. M. Foster, Secretary
Society of American Bacteriologists
Department of Bacteriology
University of Wisconsin
Madison, Wisconsin

Re: S.A.B.—Tax Exemption

Dear Dr. Foster:

Yesterday I talked with Dr. John Bailey while he was in Baltimore and he asked me to write you concerning the ruling given your Society by the

Department of Internal Revenue under date of May 6, 1957.

The Society had asked to be classified as a scientific organization and to be entitled to tax exemptions thereby afforded. The Department of Internal Revenue denied the classification requested, but did classify your Society as a "business league." This classification denies to you one benefit; that is, contributions made to your Society are not deductible by the donors in computing their taxable income. This may not have been much of a hardship in the past but whether it will be in the future is a matter of some speculation.

Other organizations that are given some tax exemptions along with business leagues, are Chambers of Commerce, Real Estate Boards, and Boards of Trade, which are not organized for profit and no part of their net earnings inures to the benefit of any private shareholders or individual.

The Treasury Department's ruling comes to the conclusion that the activities and operations of your association are directed for the most part toward the betterment and improvement of your profession and the business interests of your members rather than the general public. This raises a reasonable inference, that if the Treasury had concluded that your operations were primarily for the benefit of the general public you would have been classified as a scientific organization, but as your activities are primarily for the benefit of the members of your Society you are entitled to no greater exemptions than a business league, etc.

Under the circumstances we have recommended to the Society that they make a new form of arrangement with the publisher, and then after operating under the new arrangement for at least one fiscal year, the Society then consider in the light of circumstances existing at that time whether or not it should request a further ruling of the Department of Internal Revenue classifying it as a scientific organization rather than a business league.

Very truly yours,
(signed) EBEN F. PERKINS

THE SOCIETY'S PUBLICATIONS

In times of general prosperity it is only natural to assume that our ventures are sharing in the boom. It is prudent, however, to examine our position and evaluate it, both with a look to the future and in comparison with the past. If this be done in the case of the Society's publications, a rather startling picture is presented if we compare the financial statements of the *Journal* and *Bacteriological Reviews* for 1952 and 1956.

1952 was the last year a single column format was used. In that year the Society published a total of 2022 pages, *Bacteriological Reviews* con-

tributing 264 pages. The circulation of the *Journal* was 7710, *Bacteriological Reviews* 8001. The gross operating revenue from all sources amounted to \$85,381.78.

Four years later the Society published 1897 two-column pages, 288 of which were in B.R. The circulation of the *Journal* had increased to 8453 and B.R. to 8730. The gross operating revenue from all sources had increased almost 22% to \$104,106.19.

These figures might seem to indicate that the publications were in a thriving condition. Examination of the net surplus for these years shows that this is not the case. In 1952 the net surplus on the \$85,000 gross was \$15,102.83, but in 1956 the \$104,000 income yielded only \$9,799.67. This is 9.4 cents per dollar income in 1956 compared to 17.6 cents in 1952, a decrease in "earnings" of 46%. The surplus in 1956 was augmented by back volume sales 47% above the five year average for this item of income.

The function of the Society is neither to engage in publishing as a profit making venture, nor to publish scientific journals at a loss. Nevertheless, the Society is faced with the possibility that it may be publishing at a loss in the near future. A glance at the financial statements of our publications indicates the reason. It cost \$70,278.95 to put out the *Journal* and B.R. in 1952; in 1956 the cost had increased 34% to \$94,306.42. On a per page basis the total cost in 1956 was \$49.713, an increase of \$14.957 per page over 1952. Subscription and space sales increased only 20.6% in that period (from \$84,536.27 to \$101,677.58).

The expenses of publication may be divided into two categories: manufacturing and distribution. In 1956 manufacturing costs (\$87,694.10) were 34.8% greater than in 1952 (\$65,041.19), and distribution costs were 26.2% greater. The greatest increase in manufacturing costs has occurred in printing, a 42% increase over the 1952 figure. The end is not in sight; an increase in printing rates of about 15% went into effect in January 1957.

Unfortunately, this is not the entire picture. Additional expenses the Society would normally incur are not included in the above calculations, as they are absorbed by the institutions and organizations employing our editors. The item for editorial costs in the financial statements is largely for secretarial assistance. No rent, heat, light, telephone, fire and liability insurance or office equipment—all proper expenses—is included. A rough idea of what these expenses might be, relative to publication costs, is indicated in the annual report of the *American Scientist*, where they amount to approximately 15% of the printing and mailing costs. Had such expenses in such a ratio been incurred, our 1956 operations would have resulted in a deficit of over \$7000.

FINANCIAL STATEMENTS J.B.—B.R.

Income	1952*	1956†
Subscription sales.....	\$71,009.03	\$81,514.61
Space sales.....	13,527.24	20,162.97
Total.....	\$84,536.27	\$101,677.58
Expenses		
Manufacturing		
Printing.....	\$47,118.86	\$67,141.83
Editorial.....	6,219.27	7,106.52
Marketing.....	117.06	54.85
Overhead.....	11,586.00	13,931.00
Total.....	65,041.19	87,694.10
Postage and mailing.....	5,237.76	6,612.32
Total expense.....	\$70,278.95	\$94,306.42
Profit current issues.....	\$14,257.32	\$7,371.06
Back vol. sales.....	845.51	2,428.61
Total profit.....	\$15,102.83	\$9,799.67

* 2022 pages, single column format.

† 1897 pages, double column format.

The increase in the dues, approved by the members in 1953, made it possible to operate the Society without using the income from its publications for that purpose. This income has been invested with the hope that sufficient funds would be available to at least partly meet the expenses the Society will have when it is no longer possible to have unpaid editors whose employers will absorb the usual expenses of an office. To have sufficient funds invested to return the amount of money these expenses would require is too much to hope for; it is, on the other hand, only prudent to attempt to have as large a fund as possible for this purpose, so that the ultimate increase in costs will have as little effect as possible on the members and subscribers. Since the funds for investment come from publication income, it is essential that this be increased over that of 1956 and maintained at a reasonable level.

The financial position of our publications can be improved by savings in manufacturing costs, by a modest increase in the circulation or by increasing the subscription price. The latter is an easy but dangerous procedure, dangerous because it tends to limit expansion of circulation. The present \$14 per year subscription limits our foreign circulation almost as much as the unfavorable monetary exchange situation. For this and purely selfish considerations an increase in subscription rates is not desirable.

Because the major cost in manufacturing our publications is in putting the manuscript into type and making the type ready for printing, a modest

increase in the number of subscriptions will produce an increase in net income. A possible source of this increase in subscriptions is the local branches. Those located in industrial areas have a high proportion of non-SAB members on their rolls.

The Society has taken steps to reduce manufacturing costs by changing the kind of paper used for the Journal. The new paper, first used for the January 1957 issue, is a machine finished paper that will take half-tones, thus eliminating, except possibly for the most critical cases, the use of two types of paper and the necessity of two press runs for each issue. It is too early to estimate accurately the saving in manufacturing costs that may be expected, but it is of interest that the cost of press work on the January 1957 issue was 32% less than that for the preceding number.

The new paper is expected to result in lower postage costs, providing, of course, that Congress does not increase postal rates too much. On the basis of the weights of the December 1956 and January 1957 issues of the Journal the new paper will result in a weight saving of several tons.

JOHN HAYS BAILEY
Treasurer

NUMBER OF PAPERS AT NATIONAL MEETINGS

If the number of papers presented at its annual meetings is any measure of a Society's health, the S.A.B. certainly is in good shape. But increases such as ours bring problems. In 1949, for example,

we had approximately 3700 active members; in 1957 we have about 5100, an increase of approximately 40%. Yet the number of papers presented at the 1949 and 1957 meetings were 215 and 456 respectively, an increase of 110%. Without regard to the significance of these figures, they clearly show the problems faced by the Program Committee in scheduling the papers within our traditional method of conducting the meetings.

Members may be interested in the following figures showing the numbers of papers presented in each of the divisions since 1935.

Year	Place	A & I	Gen.	Med.	Physiol.	Public Health	Total
1935	New York	20	41	77	—	—	138
1936	Indianapolis	47	35	58	—	—	140
1937	Washington, D. C.	31	33	57	—	—	121
1938	San Francisco	36	39	56	—	—	131
1939	New Haven	31	33	97	—	—	161
1940	St. Louis	29	47	57	—	—	133
1941	Baltimore	41	53	76	—	—	170
1942	No meeting						
1943	No meeting						
1944	New York	22	54	55	—	—	131
1945	No meeting						
1946	Detroit	41	45	51	—	—	137
1947	Philadelphia	43	69	89	—	—	201
1948	Minneapolis	44	63	82	—	—	189
1949	Cincinnati	41	67	80	27	—	215
1950	Baltimore	31	75	101	51	—	258
1951	Chicago	29	101	124	54	—	308
1952	Boston	28	94	121	69	—	312
1953	San Francisco	39	57	100	69	—	265
1954	Pittsburgh	31	90	139	79	—	339
1955	New York	43	98	161	102	—	404
1956	Houston	44	94	140	65	—	343
1957	Detroit	72	112	146	96	30	456

COMMITTEE REPORTS FOR 1956

President's Fellowship Award Committee

Since the fifty-sixth meeting of the Society, held at Houston, Texas, April 29–May 3, 1956, 15 applications for President's Fellowships have been received, 11 of which have been approved, 3 rejected, and 1 is still pending. Six of those approved were reported in the *News Letter* of August 1956. The other 5 are the following:

Mr. Hugh B. Higginbotham, University of Missouri, to learn techniques for studying the cultivation, physiology, antigenicity, and pathogenicity of the genus *Leptospira*, under the direction of Dr. A. D. Alexander, Walter Reed Army Institute of Research, Washington, D. C.

Mr. Phillip V. Engler, University of Arkansas, to study electron microscopy under Dr. Carl G. Harford, Washington University School of Medicine, St. Louis.

Dr. L. S. Baron of Walter Reed Army Institute of Research, Washington, D. C., to investigate the possibilities of use of transduction by bacteriophage as a means of studying the genetics of carbohydrate metabolism in *Salmonella* with Dr. Ellis Englesberg of the Biological Laboratory, Cold Spring Harbor.

Mr. J. A. Cameron, University of Tennessee, to become informed in techniques of infra-red spectroscopy which are to be used in microbiological research. The studies are to be made

at the Massachusetts Institute of Technology, Cambridge, Massachusetts.

Dr. Robert F. Gilfillan, Medical College of South Carolina, at Charleston, to study tissue culture, serological and animal techniques, and methods for laboratory diagnosis of certain virus diseases with Dr. Joseph L. Melnick at Yale University.

The approved Fellowships constituted stipends totalling \$3216.00. The fund requested by the pending Fellowship is \$512.00. The average amount of money for a Fellowship grant has been \$292.00.

All President's Fellows have been requested to submit brief reports of their Fellowship experience and suggestions for making the Fellowships more effective. Reports have been received from 7 of the 11 Fellows. In all cases the Fellows reported that they had profited from the Fellowships and were grateful for the opportunities provided by them.

The Committee submitted an interim report to

the President and Secretary on August 15, 1956. A copy of this report was sent to the Difco Laboratories, donors of the Fellowships.

In order to make the best possible use of the Fellowship funds there has been need for more general knowledge of the Fellowships by the qualified members that need them. In order to publicize the Fellowships more widely, letters were written to the Councillors of all local branches on December 20, 1956, requesting them to bring the President's Fellowships to the attention of the members of his/her branch. Information about the Fellowships and an application blank accompanied each letter. The number of applications for President's Fellowships has not met the expectations of the Committee. It is requested that the Councillors publicize the Fellowship program so that the research programs of young microbiologists will be provided the assistance for which the Fellowships were established, whenever needed. Microbiologists should be encouraged to submit applications to the Committee. Funds are available for additional Fellowships.

At all times the Committee is receptive to suggestions for improving the effectiveness of the program; constructive ideas are solicited.

It is the feeling of the Committee that the Fellowships have already served a useful purpose for several members of the Society. It is hoped and expected that the Fellowships will play an increasingly valuable role in aiding young investigators in microbiology to develop sound principles and methods of research. It is recommended, therefore, that the Fellowship program be continued and that the representatives of the Difco Laboratories be informed of our interest in the Fellowships and our gratitude for their generous financial support of the program.

The Committee:

DR. CHARLES A. EVANS
DR. I. C. GUNSALUS
DR. ROBERT L. STARKEY,
Chairman

March 14, 1957

Publications Committee

The annual report from each Editor of the Society's publications will appear in the April issue of *Bacteriological News*. It is doubtful that these reports will be in your hands before the Detroit meeting. Therefore, each Editor and representatives from the Williams and Wilkins Company are being asked to be present at the Council meeting when committee reports are presented.

Dr. M. J. Pelczar will also report on the progress being made in the publication of the *Manual of Microbiological Methods*. This book will replace the leaflets published by the Committee on Technique for a number of years under the general head-

ing of *Manual of Methods for the Pure Culture Study of Bacteria*.

The Publications Committee will welcome the opportunity to discuss matters with the Council in order that our publications may continue to serve the best interests of the Society.

J. R. PORTER, Chairman
P. W. WILSON
E. M. FOSTER
H. BOYD WOODRUFF
JOHN HAYS BAILEY

Archives Committee

A complete, relatively detailed, itemized list of the archives material received from the files of the Society's first Archivist, Dr. Barnett Cohen, has been compiled and a continuation listing system initiated for material currently being received. Copies of the list have been made available to the committee and to the Secretary of the Society. A number of items have been received during 1956 including copies of early convention programs, convention registration lists, and membership lists deposited by H. J. Conn and J. M. Sherman, former Presidents of the Society.

For the Houston Meeting, May 1956, the Archives Committee sponsored an exhibit of materials from the archives including material relating to the early days of bacteriology in Texas.

Each member of the Society is requested to bring the attention of the Archives Committee to items of possible interest relating to the history of bacteriology in America. Early convention or other photographs, material relating to early members of the Society and other historical material, often of little interest to the owner, may represent "gaps" in the Archives file and therefore be of potential value.

STANHOPE BAYNE-JONES
P. F. CLARK
H. J. CONN
L. S. McCLUNG, Chairman

Committee on Bacteriological Technic

Negotiations for the publication of the *Manual of Microbiological Methods* were completed last fall with the McGraw-Hill Book Company. The new title was selected to replace that of the *Manual of Methods for the Pure Culture Study of Bacteria*. Publication date has been set for the summer of 1957. The new Manual will appear as a bound book, chapters replacing the former style of leaflets. Two entirely new subjects are included; namely a chapter on *Virological Technics* and a chapter on *Maintenance and Preservation of Cultures*. Several of the older chapters have been completely rewritten and all others have been revised to some extent.

The Committee is currently directing its attention to other areas of microbial methodology, e.g.

microbiological assays, tissue cultures, milk and water analysis, etc., with the idea of developing Society monographs or manuals on these subjects.

MICHAEL J. PELCZAR, JR.
Chairman

Committee on Sanitary Methods for the Examination of Water

This Committee has fully participated in the activities of the APHA Subcommittee on Standard Methods for the Examination of Water, Sewage and Industrial Wastes. This past year immediately followed publication of "Standard Methods," Tenth Edition, so that committee work consisted of little besides the annual meeting in Atlantic City on November 15. At this meeting the Subcommittee prepared a statement on the Status of the Membrane Filter Test for Presence of Members of the Coliform Group. The statement, I understand, has not received support of the entire subcommittee and has, therefore, not been transmitted to the sponsoring organizations for consideration.

Dr Charles C. Croft, Assistant Chief, Ohio State Department of Health Laboratories has continued active as SAB liaison member of the APHA Subcommittee. He attended the Subcommittee meeting in Atlantic City, and has agreed to carry out a comparative study of cultural procedures for the identification and enumeration of enterococci.

PAUL KABLER, *Chairman*

Committee on Materials for Visual Instruction in Microbiology

Great interest continues to be shown in the use of visual aids in microbiology and in the services offered by our Committee. Motion picture films continue to be the mainstay of the Committee's activities. Not only are the films used by members of the Society and allied professional individuals but by schools of nursing, liberal arts colleges, high schools, and for programs sponsored by scientific societies. Authors of textbooks are selecting prints from the Committee's collection for illustrations in textbooks. Lantern slides of the 2 x 2 inch size are in demand. The Society of Japanese Bacteriologists has a committee comparable to ours. Last year we were instrumental in having an American distributor of films make several scientific films available in Japan on a loan basis.

The financial activities of the Committee on Materials for Visual Instruction in Microbiology for 1956 were as follows:

Receipts:

Balance, cash on hand March 9, 1956.....	378.65
Income from sale and rental of visual aids.....	1176.84
	<hr/>
	\$1555.49

Disbursements:

Photographic materials.....	469.37
Secretarial services July 1, 1956 to June 30, 1957.....	206.00
Postage, freight and express....	189.51
Printing and mimeographing....	94.51
Transportation.....	23.46
4 drawer filing cabinet.....	28.35
Repairs to equipment.....	15.62
Royalties on film.....	16.00
Telegram.....	1.32
Refund.....	1.28
Customs duties.....	12.50
Miscellaneous supplies.....	10.69
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	1068.61

Balance, cash on hand, February 25, 1957.....	486.88
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There are unpaid invoices amounting to about \$175.00 but this will be offset by the few outstanding bills and the replenishing of mimeographed material.

HARRY E. MORTON, *Chairman*

New Acquisitions by Committee on Materials for Visual Instruction in Microbiology

The Committee has reviewed nearly twenty additional motion picture films and prepared abstracts of them. Abstracts of these and previously reviewed films are available from the Chairman at three cents each.

ABSTRACT NO. AND TITLE OF FILM

232	A new standard of precision in microfiltration and analysis. (Millipore filters) Co, So.	750' (1955)
233	Career: Medical technology. Co, So.	800' (1954)
234	Stop rheumatic fever. B & W, So.	400' (1954)
235	Phase microscopy of normal living blood cells. B & W, So.	1000' (1954)
236	BCG vaccination against tuberculosis. Co, So.	750' (1954)
237	An outbreak of staphylococcus intoxication. Co, So.	500' (1955)
238	Elementary laboratory technics in bacteriology. Co, So.	750' (1955)
239	Tuberculosis. (3rd ed.) B & W, So.	400' (1955)
240*	Flagella and motility of spirilla. Sunlight, dark-ground microscopy. B & W, Si.	400' (1955)
241*	Genesis of bacterial flagella. Sunlight, dark-ground microscopy. B & W, Si.	350' (1955)
242	Public health aspects of migrant workers. B & W, So.	700' (1955)
243*	Gross morphologic changes in virus infected cells. B & W, Si.	800' (1956)

- 244 Rabies control in the community. 375' (1956)
B & W, So.
- 245 The age of promise. (Terramycin) 400' (1956)
B & W, So.
- 246 Non-syphilitic venereal diseases. 1050' (1955)
Co, So.
- 247 The treatment of moniliasis with 700' (1955)
mystatin. Co, So.
- 248 Preparing for surgery. Co, So. 900' (1956)
- 249 Continuity of life. Basic nature of 500' (1956)
sexual reproduction. Co, So.
- 250 Death of a cell. Cinemato- 525' (?)
graphy with the phase contrast
microscope. B & W, So.

Co = color; B & W = black and white; So =
sound; Si = silent. () = date of production.

* Film distributed by the Committee.

The Committee has also added nearly twenty-five still pictures to its collection. These are available for purchase or rental in either the 2 x 2 inch or 3 1/4 x 4 inch lantern slides. They are also available by purchase as black and white photographic print, 5 x 7 or 8 x 10 inches. Mimeographed legends accompany each lantern slide or print. Enquiries regarding these materials should be addressed to the Chairman.

NUMBER AND TITLE OF STILL PICTURE

- LS-329 Photomicrographs of smooth, mucoid colonies and capsulated cells of virulent strain of *Bacillus anthracis* grown in presence of added CO₂ and of rough colonies and non-capsulated cells of same strain when grown in air.
- LS-330 Electron shadowed micrograph of serpentine cords of *Mycobacterium tuberculosis* variety *hominis* H37Rv.
- LS-331 Electron shadowed micrographs of acute respiratory disease (ARD) viruses.
- LS-332 Electron shadowed micrograph of budding *Saccharomyces cerevisiae* with a bud scar.
- LS-333 Electron shadowed micrograph of budding *Saccharomyces cerevisiae*.
- LS-334 Electron shadowed micrograph of *Saccharomyces cerevisiae* with at least seven bud scars.
- LS-335 Electron micrograph of longitudinal section through a budding cell of *Saccharomyces cerevisiae*.
- LS-336 Electron micrograph of longitudinal section through a single cell of *Saccharomyces cerevisiae* showing birth scar and bud scar.
- LS-337 Growth curves of *Bacterium tularensis* grown in glucose-cystine broth.
- LS-338 Electron shadowed micrograph of cells of *Bacterium tularensis* from a 12 hour-old broth culture.
- LS-339 Electron shadowed micrograph of cells of

Bacterium tularensis from an 18-hour-old broth culture.

- LS-340 Electron shadowed micrograph of cells of *Bacterium tularensis* from a 24-hour-old broth culture.
- LS-341 Electron shadowed micrograph of cells of *Bacterium tularensis* from a 48 hour-old broth culture.
- LS-342 Electron shadowed micrograph of cells of *Bacterium tularensis* from a 72 hour-old broth culture.
- LS-343 Electron shadowed micrograph of cells of *Bacterium tularensis* from a 96 hour-old broth culture.
- LS-344 Four electron shadowed micrographs of *Pasteurella pestis* showing normal type of binary fission and atypical division.
- LS-345 Four electron shadowed micrographs of *Pasteurella pestis* showing advanced stages of atypical division.
- LS-346 Four electron shadowed micrographs of *Pasteurella pestis* showing small round bodies at ends or sides of cells.
- LS-347 Four electron shadowed micrographs of *Pasteurella pestis* showing typical and atypical cell division.
- LS-348 Electron shadowed micrograph of *Malleomyces mallei*.
- LS-349 Electron shadowed micrograph of *Malleomyces pseudomallei*.
- LS-350 Electron shadowed micrograph of two cells of *Malleomyces pseudomallei*.
- LS-351 Electron shadowed micrograph of two cells of *Pseudomonas stutzeri*.
- LS-352 Electron shadowed micrographs of two cells of *Pseudomonas ovalis*.

HARRY E. MORTON, Chairman
MARSHALL W. JENNISON
WM. H. EWING
J. EMERSON KEMPF
WM. C. SCHNEIDER

REPORT OF THE EMPLOYMENT BUREAU

May 1, 1956-April 28, 1957

Registrations

For the period of this report, 180 bacteriologists registered with the Employment Bureau for placement. With an active registry of 92 from the previous year, a total of 272 members were registered with the Bureau for the year. Based on the data in previous annual reports, approximately 1087 bacteriologists have used the services of the Bureau since its inception.

As of the date of this report, there are 109 active registrants enrolled with the Bureau.

ACTIVE REGISTRANTS April 28, 1957

Level of Training	Sex	Number
B.S. Degree.....	Male	8
B.S. Degree.....	Female	2
M.S. Degree.....	Male	25
M.S. Degree.....	Female	1
Ph.D. Degree.....	Male	71
Ph.D. Degree.....	Female	2
Total.....		109

Employer Requests

During the period of this report, the Bureau received a total of 225 job notifications from employers with requests for assistance in filling staff vacancies. The positions have been classified as follows:

POSITIONS AVAILABLE

Type	No.	Level of Training Required		
		B.S.	M.S.	Ph.D.
Academic.....	62	6	22	34
Government, Public Health, Hospitals, etc.....	111	47	31	33
Industrial.....	52	15	15	22
	225	68	68	89

Of the 225 job vacancies, 136 positions or approximately 60% were for bacteriologists with the B.S. and M.S. levels of training and 40% with the Ph.D. degree. It should be noted as of April 28, 1957, 36 bacteriologists with the B.S. and M.S. levels of training were registered with the Bureau, while the total number of requests received from employers for bacteriologists with these training requirements totaled 136. This indicates that this situation is still a critical one.

In processing employer requests for assistance in placements, approximately 1850 registry files were forwarded to employers for review.

Placements

For the period of this report, 22 placements were made through the services of the Bureau. Of the 22 placements, four (4) were government or fellowship appointments, and hence no commission was charged. Following is a classification of the placements with the respective salary ranges:

POSITION PLACEMENTS MADE

Type	No.	Salary Range
Academic	8	\$4,500-8,500
Government, Public Health, Hospitals, etc.	8	3,950-7,570
Industry	6	4,500-9,600
	22	

CLASSIFICATION OF PLACEMENTS

Type	No.	Training	Salary Range
Academic	6	Ph.D.	\$5,300-\$8,500
	1	M.S.	\$1,800
	1	B.S.	4,500
Government Public Health, Hospitals, etc.	5	Ph.D.	\$6,390-\$7,570
	1	M.S.	\$4,525
	2	B.S.	\$3,950-\$5,310
Industry	3	Ph.D.	\$6,600-\$9,600
	3	M.S.	\$4,500-\$5,720

Financial Statement

May 1, 1956-April 28, 1957

Refundable Registration Fees as of April 30, 1956-92 @ \$5.00.....	\$460.00
Income	
Commissions from placements.....	\$860.60
Enrollment Fees-152 @ \$5.00.....	760.00
Re-registration Fees-4 @ \$3.00.....	12.00
	\$1,632.60
Total	\$2,092.60
Expenditures	
Secretarial Services.....	432.88
Printing, Supplies, Equipment, etc.....	131.07
Postage.....	93.76
Director's Expenses to Houston, Texas tel., etc....	321.52
Registration Fees Refunded.....	550.00
	\$1,529.23
Refundable Registration Fees on Deposit, April 28, 1957-109 @ \$5.00.....	545.00
	\$2,074.23
Balance	\$18.37

Observations

There has been a marked improvement on the part of registrants in responding to employers and in notifying the Bureau of their availability and change in address. This can be attributed to the regulations placed in effect following Council's support of inactivating the registrations of those persons who do not respond to inquiries from employers and the Bureau and requiring re-registration.

There has been an increasing interest in the pamphlet, "A Career in Bacteriology," published by the Society. The Bureau, alone, has distributed 152 copies of the booklet, following the receipt of requests from college placement offices, high school students, and faculty advisors.

It should be noted that of the 225 job notifications received by the Bureau, 50% were received from Federal Government, State and Municipal Public Health and hospital laboratory supervisors. The majority of the requests were for bacteriologists with the B.S and M.S. levels of training. The critical shortage of bacteriologists with the lower levels of training and the lower salary scale prevalent in this employment category prompted the formation of a committee by the A.P.H.A. to study the problem and develop a program to interest bacteriologists in this type of work and strive for adjusted salary scales to meet the competition for this type of scientific competency. A similar shortage exists in academic institutions.

Recommendations

1. The critical shortage of bacteriologists with the B.S. and M.S. levels of training was called to the attention of Council last year with the suggestion that the Society survey the situation and determine how the demands can be met. It is again recommended that Council take some positive action by the appointment of a committee to survey the matter during the next year and formulate a program which would include future national needs, development of visual aid material for use in high schools and in college orientation courses, publicity material, opportunities, and other pertinent material.

2. The unofficial standing of the Employment Bureau in the Society has been of concern to the various directors and to others interested in this function. In contrast to other functions of the Society, several of which are one man functions, it does not have the standing or stature of Invited Members (Non-voting) on the Council and has only a "quasi" official standing. It is recommended that the Council Policy Committee and Council evaluate the status of the Employment Bureau in terms of (1) continuing contribution and service to the Society membership, (2) necessity of the

function, and (3) future potential in our growing organization. It is requested that the Council Policy Committee and Council consider the matter and reach a decision on the official status of the Employment Bureau.

COMMITTEE APPOINTMENTS FOR 1957-58

The following appointments have been made to Committees of the Society for 1957-58.

Committees established by the Constitution

Council Policy Committee

P. W. Wilson, <i>Chairman</i>	K. B. Raper
Harry Eagle	J. R. Porter
J. H. Bailey	R. Donovick
E. M. Foster	J. H. Hanks
C. A. Stuart	

Membership Committee

C. E. Lankford, <i>Chairman</i>
D. R. Colingsworth
E. C. Berry

Archives Committee

L. S. McClung, <i>Chairman</i>	P. F. Clark
S. Bayne-Jones	H. J. Conn

Program Committee

R. D. Housewright, <i>Chairman</i>	E. S. Wynne
M. W. Chase, <i>Vice Chairman</i>	W. S. Preston
S. E. Hartsell	R. D. DeMoss

Publication Board

J. R. Porter, <i>Chairman</i>	P. W. Wilson
H. W. Scherp (beginning Jan. 1, 1958)	E. M. Foster
H. B. Woodruff	J. H. Bailey

Other Committees

Committee Advisory to the Chief of the Chemical Corps

G. M. Dack, <i>Chairman</i>	W. B. Sarles
Irving J. Gordon	E. J. Ordal
W. A. Hagan	W. O. Nelson
J. V. Irons	A. G. Norman
A. P. McKee	

Committee on Annual Meeting Places

R. D. Housewright
O. Wyss
J. Y. Sugg

Committee on Bacteriological Technique

M. J. Pelczar, <i>Chairman</i>	A. P. McKee
R. C. Bard	A. J. Riker
G. W. Burnett	J. Warren
H. J. Conn	O. B. Weeks
R. D. DeMoss	F. A. Weiss
C. E. Evans	R. C. Kersey
M. W. Jennison	

Committee on Finance

J. H. Bailey, <i>Chairman</i>	Harry Eagle
P. W. Wilson	C. A. Stuart
E. M. Foster	J. R. Porter

Committee on Materials for Visual Instruction

H. E. Morton, <i>Chairman</i>	M. K. Jennison
W. H. Ewing	W. C. Schneider
J. E. Kempf	

Committee on President's Fellowship Award

R. L. Starkey, <i>Chairman</i>
C. A. Evans
I. C. Gunsalus

Committee on Taxonomy

K. B. Raper, <i>Chairman</i>	C. A. Evans
R. E. Buchanan	R. L. Starkey
C. F. Niven, Jr.	

Sub-Committee on Taxonomy of the Actinomycetes

David Gottlieb, <i>Chairman</i>	R. G. Benedict
K. L. Jones	John B. Routien
R. L. Pittenger	

Technical Advisory Committee to the American Type Culture Collection

R. P. Tittsler, <i>Chairman</i>	Mathilda Solowey
Chester Emmons	Harriette D. Vera

Committee on Sanitary Methods for Examination of Water

P. W. Kabler, <i>Chairman</i>
C. Croft
Elizabeth D. Robinton

Committee on the Future of the Annual Meeting

O. Wyss, <i>Chairman</i>
R. D. Housewright
T. C. Stadtman
W. J. Nungester

Representatives and Directors

Director of Placement Bureau

M. J. Foter

Representatives to ATCC

R. E. Buchanan
C. Lamanna

Representative to International Association of Microbiological Societies

S. Mudd

Representatives to National Research Council

R. L. Starkey (Agriculture)
W. A. Hagan (Medicine)

Representatives to AAAS

R. E. Hungate
S. Mudd

NOMINATIONS FOR OFFICERS OF THE SOCIETY

The Nominating Committee presents the following candidates for offices of the Society for 1958. The Committee consists of Drs. H. Orin Halvorson, Chairman, J. L. Etchells, W. M. Ferguson and A. J. Salle. Biographical data of the nominees are adapted from "American Men of Science."

For President

Dr. Harry Eagle, National Institutes of Health, Bethesda, Md. Born New York, N. Y. July 13, 1905. A.B. Hopkins, 1923, M.D. 1927, hon. M.S. Yale, 1948. Intern, Hopkins Hosp. 1927-28; research fellow, sch. med. Hopkins, 1928-29; asst. 1929-30; instr. 1930-32; research fellow Harvard Med. Sch. 1932-33; assoc. bacter. sch. med. Pennsylvania, 1933-35; asst. prof. 1935-36; passed asst. surgeon. U.S. P.H.S. 1936-43, surgeon 1943-45, sr. surgeon 1945-47, med. dir. 1947-, sci. dir. research br. Nat. Cancer Inst. 1947-49, Chief Exp. Therapeutics, Microbiol. Inst. Nat. Insts. Health, 1949-, Lectr. sch. med. Hopkins, 1936-47; dir. venereal disease research lab, Hopkins and U.S. P.H.S. 1936-46. Trustee microbiol. found. Rutgers. Mem. microbiol. study sect. U.S.P.H.S.; subcommittee on venereal diseases, N.R.C. Eli Lilly Award 1936; Alvarenga prize, Col. Physicians, Phila. 1936. With Office Sci. Research and Development 1944. SAB; Soc. Exp. Path.; Soc. Clin. Invest.; Am. Physicians; Soc. Pharmacol.; Assn. Immunol. Immunochemistry; antigen-antibody reaction; serodiagnosis of syphilis; blood coagulation; chemotherapy of syphilis; trypanosomiasis and tropical diseases; detoxification of metal poisoning; mode of action of antibiotics; tissue culture.

For Vice-President

Dr. Philip R. Edwards, U. S. Public Health Service, Communicable Disease Center, Box 185, Chamblee, Ga. Born Owensboro, Ky., August 30, 1901. B.S., Kentucky, 1922; Ph.D. Yale, 1925. Asst. bacteriologist, Connecticut, 1923-25; bacteriologist, Kentucky Agr. Exp. Sta. 1925-48; dir. nat. salmonella center, 1939-48; Bacteriologist in charge enteric bacter. labs, U.S.P.H.S., Communicable Disease Center, 1948-. Prin. investiga-

gator, Office Sci. Research and Development, 1941-45; bacteriologist in charge salmonella grant, U.S.P.H.S. 1945-; consultant, Communicable Disease Center, Atlanta, Ga. 1947-. SAB; hon. mem. Vet. Med. Assn.; Soc. Exp. Biol. Prenatal infections of horses; streptococci; salmonella; paracolon bacteria.

R. E. Hungate, Dept. of Bacteriology, University of California, Davis, Calif.; Born Cheney, Wash., March 2, 1906. A.B. Stanford, 1929, Ph.D. 1935. Acting instr. biol. Stanford 1930-33, instr. 1933-35; instr. zool. Texas 1935-38, asst. prof. 1938-43, assoc. prof. and research assoc. biochem. inst. 1943-45; assoc. prof. bacter. State Col. Wash. 1945-49; Prof. 1949-56. Prof. bacter. and dept. chairman U. California at Davis, 1956-. Guggenheim fellow, 1950. Subcommittee on bloat, N.R.C. 1954. A.A.; Soc. Zool.; S.A.B.; Soc. Protozool. Cohesion of water; carbohydrate and nitrogen nutrition of termites; wood decomposition biological decomposition of cellulose; nutrition of ruminant protozoa; biology and biochemistry of ruminant cellulose bacteria; growth of mammary cancers in eggs; rates of natural microbial processes; microbiology of acute indigestion and bloat in ruminants; microbiology of sludge.

O. B. Williams, Dept. Bacteriology, University of Texas, Austin, Texas. Born Kosse, Texas, September 17, 1895. B.A. Texas 1921, M.A. 1923; Ph.D. California 1928. City water bacteriologist, Austin, 1921-23; instr. bot. Texas, 1922-25, asst. prof. bacteriology, 1925-27, assoc. prof. 1927-35; bacteriologist, research lab. Nat. Canners Assn. 1935-41; Prof. bacter. Texas 1941-. Chairman of dept. Teaching fellow, California, 1925-27. U.S. Army 1917-19. A.A.; S.A.B.; Inst. Food Tech.; Soc. Gen. Microbiol. Great Britain. General and food bacteriology.

For Secretary

Dr. E. M. Foster, Dept. of Bacteriology, University of Wisconsin, Madison, Wis. Born Alba, Texas, January 1, 1917. B.A. North Texas State Col. 1936, M.A. 1937; Ph.D. Wisconsin 1940. Wisconsin Alumni Research Foundation scholar, 1937-38, univ. fellow, 1938-39. Instr. bacter. Wisconsin, 1940-41; Texas, 1941-42; asst. prof. Wisconsin 1945-46, assoc. prof. 1946-52, prof. 1952-. With Joint Research and Development Bd. 1947. U.S. Army 1942-45. S.A.B.; Am. Dairy Sci. Assn.; Inst. Food Tech.; Int. Assn. Milk and Food Sanit. Bacteriology of cheese; microbiology of meat products, the rumen and refrigerated foods; silage; lactic acid bacteria; drying microorganisms.

For Treasurer

Dr. John Hays Bailly, Sterling-Winthrop Research Institute, Rensselaer, N. Y. Born Chicago, Ill. May 3, 1900. B.S. Chicago 1924, Ph.D. 1928; D.P.H. Michigan, 1938. Asst. anat. Chicago 1926-

28; fellow, Nelson Morris Inst. 1928-29; Huesman Fellow, James Whitcomb Riley Hospital and mem. dept. pediatrics, sch. med. Indiana, 1929-32; research Municipal Contagious Disease Hosp., Chicago, 1932-35; sr. bacteriologist, Illinois State Dept. Health, 1935-38; asst. prof. bacter. and dir. div. bacter. dept. prev. med. pub. health and bacter., sch. med. Loyola University (Chicago) 1938-41; research bacteriologist, Winthrop Chem. Co. 1942-45; Chief bacteriologist, Sterling-Winthrop Research Inst. 1945-. Civilian with O.S.R.D. 1944. A.A.; S.A.B. (Secretary-Treasurer, 1953-57; Treasurer 1957-); Soc. Gen. Microbiol. England; Fellow Inst. Med. Chicago. Antibody formation; types of streptococci in normal and diseased children; mode of action of antibiotics; antibiotics of plant origin; penicillin; resistance to antibiotics.

For Councilor-at-Large

Dr. Richard H. McBee, Department of Botany and Bacteriology, Montana State College, Bozeman, Mont. Born Eugene, Oregon, May 15, 1916. B.S. Oregon State College 1938, M.S. 1940; Maryland, 1939-41; Ph.D. State Col. Wash. 1948. Teaching fellow bacter. Maryland, 1939-40, asst. 1940-41; sr. asst. bacteriologist, Maryland State Dept. Health 1941-42, assoc. bacteriologist, 1942-43; jr. bacteriologist, State Col. Wash. 1947-48, asst. bacteriologist, 1948; atomic energy commission fellow, California, 1948-49; asst. prof. bacter. Montana State Col. 1949-50, assoc. prof. 1950-. Sanit. C., 1943-46. A.A. S.A.B.; Chem. Soc. Soc. Prfnl. Biol. Metabolism of coliform bacteria; cellulose fermentations.

Dr. Erling J. Ordal, Dept. of Microbiology, University of Washington, Seattle, Wash. Born Waterville, Iowa, August 20, 1906. B.A. Luther Col. 1927; Shevin fellow, Minnesota, 1931-33, Ph.D. 1936. Teaching asst. math., Minnesota, 1929-30, teaching fellow bacter. 1933-36, instr., 1936-37; Washington (Seattle), 1937-38, asst. prof. 1938-43, assoc. prof. 1943-. Chem. Soc.; S.A.B.; Inst. Food Tech. Soc. Exp. Biol. Soc. Gen. Microbiol.; Soc. Limnol. and Oceanog. Germicides; anaerobic metabolism; electrokinetic studies on bacteria; hydrogen metabolism; myxobacteria; aquatic bacteriology.

Dr. Margaret Pittman, National Institutes of Health, U.S.P.H.S., Bethesda, Md. Born Prairie Grove, Ark. January 20, 1901. A.B. Hendrix Col. 1923, hon. L.L.D. 1954; M.S. Chicago, 1926, Metropolitan Life Ins. Co. fellow, 1926-28, Ph.D. 1929. Prin. acad. Galloway Woman's Col. 1923-25; asst. Rockefeller Inst. 1928-34; asst. bacteriologist, State Dept. Health, N. Y. 1934-36; assoc. bacteriologist, Nat. Inst. Health, U.S.P.H.S. 1936-41; bacteriologist 1941-47, sr. bacteriologist, 1948-54, prin. bacteriologist, 1954-. A.A.; S.A.B.; Soc. Exp. Biol.; Soc. Gen. Microbiol.; Harvey Soc. Hemophilus

pneumococcus; meningococcus; bacterial classification; respiratory infections, meningitis and conjunctivitis; antisera and pertussis vaccine standardization; contaminants of biologic products; pertussis histamine sensitization.

Dr. Orville Wyss, Dept. of Bacteriology, University of Texas, Austin, Texas. Born Medford, Wis. September 10, 1912. B.S. Wisconsin 1937 M.S. 1938, Ph.D. 1941. Asst. bacter. Wisconsin 1937-41; research bacteriologist, Wallace & Teirnan Products Co. 1941-45; assoc. prof. bacter. physiol. Texas, 1945-48, prof. 1948-. Instr. Texas 1939. Civilian with U.S. Army 1944. A.A.; Chem. Soc.; S.A.B.; Soc. Biol. Chem. Bacterial physiology and genetics; biological nitrogen fixation.

DIVISION OFFICERS FOR 1957

(Terms expire after 1958 Annual Meeting)

Agricultural and Industrial Division

Chairman—STANLEY HARTSELL, Department of Bacteriology, Purdue University, Lafayette, Indiana.

Vice Chairman—HARRY E. GORESLINE, Quartermaster Food and Container, Institute for the Armed Forces, 1819 West Pershing Road, Chicago 9, Illinois.

Secretary—KARL L. SMILEY, Hiram Walker and Sons, Inc., Peoria, Illinois.

General Division

Chairman—E. STATEN WYNNE, University of Texas, M.D. Anderson Hospital and Tumor Inst., Houston, Texas.

Vice Chairman—BROOKS D. CHURCH, Warner-Lambert Pharmaceutical Co., Morris Plains, New Jersey.

Secretary—ROBERT P. WILLIAMS, Department of Microbiology, Baylor University, College of Medicine, Houston, Texas.

Medical Division

Chairman—WILLIAM PRESTON, Hygienic Lab, University of Michigan, Ann Arbor, Michigan.

Vice Chairman—IRVING GORDON, Department of Microbiology, University of Southern California, School of Medicine, Los Angeles 7, Calif.

Secretary—ALBERT P. MCKEE, Department of Bacteriology, College of Medicine, State University of Iowa, Iowa City, Iowa.

Physiology Division

Chairman—RALPH DEMOSS, Department of Bacteriology, University of Illinois, Urbana, Illinois.

Vice Chairman—M. I. DOLIN, Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Secretary—ARNOLD BRODIE, Department of Bacteriology and Immunology, Harvard Medical School, Boston, Massachusetts.

Public Health Group

Chairman—EVAN T. BYNOE, Lab. of Hygiene Department of National Health and Welfare, 45 Spencer Street, Ottawa, Ontario, Canada.

Vice Chairman—ERWIN NETER, Children's Hospital, 219 Bryant Street, Buffalo, New York.

Secretary—IRVING OLITZKY, Public Health Lab. Section, Philadelphia Department of Health, Philadelphia, Pennsylvania.

(The Public Health Group was established on a trial basis in 1955. In 1956 the Council voted to continue the group for another two years "on a provisional basis." In the meantime the group was "encouraged to progress toward divisional status" by organizing its own programs. The question of divisional status for the Public Health Group will come before the Council in 1958.)

A MESSAGE ABOUT THE PUBLIC HEALTH GROUP

As you can see from the foregoing statement, the fate of our group hangs in the balance!

Why are we trying to establish a separate Public Health Bacteriology Division? Many felt that there were sufficient members in the Society primarily interested in public health bacteriology who would like to see (1) their interests considered separately, (2) papers on this subject given at annual meetings grouped together rather than scattered through the sessions of the other divisions, and (3) symposia arranged at these meetings which were directly pertinent to their interests. Moreover, it was hoped that if this could be accomplished many more bacteriologists in the public health field would be attracted to the Society, and it would thus lead to a stronger Society. For many years, several bacteriologists in the public health field have felt that the S.A.B. meeting was not the meeting for them; that the papers for the most part were highly academic and dealt with subjects which bore but slight relationship to their working interests; and that diagnostic bacteriology (including virology), serology and bacteriology in relation to sanitation, which constitute the major efforts of a public health bacteriology laboratory, were being neglected.

Now what success have we had to date? At the Houston meeting in 1956, the first year of our existence as a separate group, 21 papers were offered for presentation in the Public Health Bacteriology Section. This was considered a sufficiently good effort for the Council to vote that the group be continued as a separate group for another two years on a "provisional basis." At the Detroit meeting in 1957, the first of this two-year "trial" period, three regular sessions of papers were sponsored by the Public Health Group, at which

30 papers were presented and an evening symposium on Virus Diagnosis in the Public Health Laboratory. While we have no exact figures for the attendance at these sessions, over 200 attended one of these sessions and 275 another, while the symposium was very well attended. In addition, more than 60 persons got together after the symposium under the Chairmanship of Dr. Erwin Neter and discussed Enterobacteriology problems into the small hours of the morning.

While the record to date is very gratifying and encouraging, the fate of our group as a separate entity will be decided in large measure by our showing at the next meeting in Chicago. Because of this, your Committee urges that all who are

interested in seeing the establishment of an active, successful Public Health division in the S.A.B. make a point now of planning to present a paper at the Chicago meeting specifically marked for the Public Health Bacteriology Group. We, however, are not interested merely in numbers of papers but rather in "quality." If we have a number of really good stimulating papers at our next meeting, there is every chance of our getting the recognition and consideration we desire.

We have passed the ball out, it's now up to you to carry it over the line!

E. T. BYNOE, PH.D.
Chairman,
Public Health Group

NEWS AND ANNOUNCEMENTS

ABOUT THE 7th INTERNATIONAL CONGRESS FOR MICROBIOLOGY

Plans for the Congress are progressing and the Organizing Committee has reached certain decisions that will interest American bacteriologists planning to attend.

As has been mentioned several times earlier, attendance at the Congress will be limited to about 1,000. Of these, approximately 300 will be able to present papers, either at the symposia or at the paper sessions. The remaining 700 will fall into two categories:

A. Those submitting papers that, although relevant, cannot be fitted into the program and will be read by title only, and

B. Those who wish to visit Stockholm and attend the Congress merely as auditors.

If the number of applications exceeds the established capacity of the Congress, a quota will be established for each country. In this event, the National Committee of each country will be asked to screen the applicants and make its recommendations to the Congress Organizing Committee. (In the U.S. the S.A.B. Program Committee will perform this function.)

A person desiring to attend the Congress may accomplish his wish in one of two ways:

1. He may be fortunate enough to receive an invitation from the Organizing Committee. This body is inviting presidents, vice-presidents, chairmen, moderators, speakers at symposia and individuals selected by section program committees to give papers on certain focal topics at some of the paper sessions.

2. He may apply for admission to the Congress. This can be done by requesting the necessary application forms from the S.A.B. Business

Manager, Mr. F. C. Harwood, Waverly Press, Inc., Mt. Royal and Guilford Avenues, Baltimore 2, Maryland. Every applicant should indicate on the application form the part of the program that interests him. If the person wishes to present a paper, he should give its title on the application form. If he wishes merely to attend as an auditor, he should write the words "auditor only" on the application. If it becomes necessary to limit attendance at the Congress the greatest reduction will be made in the "auditors only" group.

All papers will be published as abstracts. Papers will be chosen not on the basis of merit alone, but mainly on consistency with other papers in the program.

Formal invitations to the Congress can be issued by the Organizing Committee to persons needing such invitations to obtain travel authorization, or for similar reasons. Persons desiring such invitations should write the Secretary of the S.A.B., setting forth the reasons why the invitation is needed.

Preliminary application cards received by the Organizing Committee have already dictated certain changes in the tentative program published in the April, 1957, *Bacteriological News*. Symposium I (The Influence of Civilization on Microbial Ecology) has been dropped and replaced by focal topic 4 (Transformation, transduction, and recombination), which in turn was replaced by a new topic, "Bacterial Anatomy." Also, focal topic 18 (Screening Diagnostic Methods) has been replaced by "Detection and Significance of fecal bacteria in foods."

The second circular containing the final application card for the Congress will be mailed by the Organizing Committee late this fall to persons

who have sent in the preliminary application forms. Persons desiring to attend the Congress should submit their preliminary applications at once.

PROPOSED ASSESSMENT FOR TRAVEL FUNDS FOR 7TH INTERNATIONAL CONGRESS

Everyone must know by now that the Seventh International Congress for Microbiology is to be held August 4-9, 1958, in Stockholm. The program of the Congress is arranged around six focal topics (see April, 1957, *Bacteriological News*). Part of the program will consist of symposia for which the Congress Committee will *invite* speakers. The balance of the program will consist of "paper sessions."

One of the major problems connected with participation in a foreign meeting naturally is travel expense. Certain agencies, mostly Federal, have funds available for travel grants to international congresses, but these are limited in amount. Furthermore, some of the granting agencies are more receptive to requests from organizations such as ours if the society itself does something to help its members who are invited to speak at the meeting.

Accordingly, at Detroit the Council approved holding a referendum whereby the membership of the Society of American Bacteriologists will be asked to assess themselves fifty cents each for one year only, the money thus collected to be contributed to a fund to defray part of the travel expenses of our members who are invited to participate in the Seventh International Congress in 1958. In addition, requests for funds will be made to granting agencies.

Because of time limitations, it will not be possible to hold the referendum in time to include the fifty cent assessment, if it is approved by the membership, on the bill for dues sent out in the fall of 1957. Therefore, the procedure will be: When you receive your ballot and dues notice late in 1957 there will be a place for you to vote on the special assessment. If the assessment is approved by a majority of the membership, an amount equal to fifty cents per member will be contributed from the treasury to the travel fund, and each member will be asked to pay the fifty cents when he pays his dues in the fall of 1958.

It should be emphasized that this assessment is for *one year only*. Funds collected from any of the sources listed above will be allocated by a committee appointed by the President among speakers *invited* to participate in the Congress.

CALL FOR ELI LILLY AWARD NOMINATIONS

Nominations for the Eli Lilly and Company Research Award for 1958 are invited. The award

is made annually to a young microbiologist who has performed outstanding research in bacteriology or its related fields. To be eligible the nominee shall be less than 35 years of age on April 30, 1958 (birth date later than April 30, 1923).

Nominations for the 1958 award should be sent to Dr. Arthur Kornberg, Chairman, Eli Lilly Award Nominating Committee, Department of Microbiology, Washington University School of Medicine, Euclid Avenue and Kingshighway, St. Louis, Missouri. Four copies of all material should be submitted and must include:

1. Month, day and year of birth.
2. Curriculum.
3. List of publications.
4. Specific reference to the research upon which the nomination is based.
5. Supporting letters, if possible.

No reprints or manuscripts should be submitted.

For the purpose of this award, outstanding research is understood to be that which is of unusual merit in the younger age group. The research is not to be judged in comparison with the work of more mature and experienced workers. In judging the nominees special consideration shall be given to the independence of thought and originality shown. Neither the nominee nor the nominator need be a member of the S.A.B.

All nominations will first be examined for eligibility by the Nominating Committee, which is composed of two members from the Society of American Bacteriologists and one each from the American Association of Immunologists and the American Society for Experimental Pathology. All eligible nominees then will be referred to the Award Committee, which selects the recipient of the award from the list of eligible candidates. The Award Committee also has representatives from the three societies named.

The award consists of \$1,000 and a bronze medal. The recipient presents the Eli Lilly and Company Award Address at a general session of the Society during its Annual Meeting.

To be considered for the 1958 award, all nominations must be in the hands of the Nominating Committee by January 15, 1958.

PRESIDENT'S FELLOWSHIPS

Funds are available to young microbiologists who need financial assistance to devote time in other laboratories studying techniques, procedures, and methods concerned with their research programs. The funds, provided by the Difco Laboratories, are available to members not more than 35 years old, as travel grants to defray transportation and maintenance expenses for short periods of study to learn new methods, improve technical proficiency, utilize equipment and library facilities unavailable to the applicants, and to seek assist-

ance in solving problems encountered in their research programs.

The Fellowships are available to qualified graduate students as well as to microbiologists of more advanced standing, and they can be used not only for laboratory study but also for participation in symposia or similar group meetings concerned with specialties in the applicant's field of research.

Each member is urged to publicize the Fellowships so that all qualified microbiologists will know of their availability and purpose and that they will be most effectively used.

Application blanks and additional information can be obtained from the following committee members who will process applications for Fellowships promptly whenever received:

CHARLES A. EVANS, Dept. of Microbiology, School of Medicine, University of Washington, Seattle 5, Washington.

I. C. GUNSALUS, The William Albert Noyes Laboratory, Dept. of Chemistry and Chemical Engineering, University of Illinois, Urbana, Illinois.

R. L. STARKEY, Dept. of Agricultural Microbiology, Agricultural Experiment Station, New Brunswick, N. J.

NATIONAL SCIENCE FOUNDATION GRANTS

The Division of Biological and Medical Sciences of the National Science Foundation announces that the next closing date for receipt of research proposals in the life sciences is September 15, 1957. Proposals received prior to that date will be reviewed at the Fall meetings of the Foundation's Advisory panels and disposition will be made approximately four months following the closing date. Proposals received after the September 15, 1957, closing date will be reviewed following the Winter closing date of January 15, 1958.

In addition to funds for the support of basic research in the life sciences, limited funds will be available during Fiscal Year 1958 (July 1, 1957-June 30, 1958) for the support of research facilities and programs at biological field stations.

Inquiries should be addressed to National Science Foundation, Washington 25, D. C.

NEW PUBLICATION SERIES

The Institute of Microbiology at Rutgers University is initiating the publication of a series of book-length manuscripts on subjects that relate to the science of microbiology.

Primarily, the series has a two-fold aim: 1. It is designed to offer an outlet for specialized contributions in the field of microbiology that are of relatively limited interest to commercial publishers, and to existing scientific journals. 2. Present plans also concern the publishing of biographical and historical studies in microbiology.

This program is operating with the financial

assistance of the Foundation for Microbiology. Although volumes for the series are being assembled by invitation, comments from any scientist are welcome with reference to desirable subjects, or in regard to authors qualified to fill existing needs. Prospective contributors are invited to express their interests. Comments or suggestions may be sent to any member of the Editorial Advisory Committee, or to Vernon Bryson, Institute of Microbiology, Rutgers, The State University, New Brunswick, New Jersey.

Members of the Editorial Advisory Committee

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RENE J. DUBOS, Rockefeller Institute for Medical Research

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LEDERLE MEDICAL FACULTY AWARDS

The purpose of the program of "Lederle Medical Faculty Awards" of the Lederle Laboratories Division of American Cyanamid Company is to assist able men and women who are working and contemplating further careers in the preclinical departments of medical schools.

The program will provide financial aid for a limited period in the support of young individuals who have demonstrated capacities both as teachers and investigators in departments of anatomy, biochemistry, microbiology, pathology, pharmacology and physiology, in order to help accelerate their development and to encourage them to remain in these disciplines. The plan is intended to assist departments to offer opportunities for development of promising individuals.

The Awards are designed for persons who have progressed beyond the state of development which is now encompassed by post-doctorate fellowships. Recipients of Lederle Medical Faculty Awards must hold "faculty rank," such as Instructor or Assistant Professor (or their equivalent, as determined by the Committee) in their medical schools, and should be individuals who give promise of staying on to continue teaching and research within the disciplines indicated above. Individuals

chosen for the Awards are to have full privileges and responsibilities for teaching and research as regular faculty members in the sponsoring department.

The Awards will be administered by an independent committee, composed of professors representing most of the pre-clinical sciences and drawn from medical schools throughout the United States. The Committee will have full and independent authority in the selection of the schools through which awards are to be made and of recipients of the Awards. All Awards will be made directly to a designated medical school in the United States or Canada and will be specified for the use of the department for the support of individuals designated to receive the Awards.

Awards will be made for a term not exceeding three years, provided that the conditions of the Award are fulfilled. In general, three types of Awards will be considered with favor:

(1) An Award which will bring into the department a new person, not previously supported either by the departmental budget or by research grants. Such an Award will be expected in its fullest sense to strengthen both teaching and research activities of the department.

(2) An Award which will continue the salary of an individual previously supported on research grants when those grants have terminated. Such an Award will be expected to strengthen teaching and maintain research activities of the department.

(3) An Award which will supplement the salary of an individual to enable the department to retain him to perform teaching and research functions vital to the department.

In general, an Award will not be made to a candidate with a stable salary provided from a departmental budget if the major purpose of the Award is to free funds for new but unspecified individuals. A candidate will receive consideration only if it is clearly evident that the departmental funds will be augmented by the full amount of the Award. Ordinarily the Awards will not include funds specifically for research, for equipment, or for the support of assistants. A grant of \$500 for each year of tenure will be made as part of the Award to be used to reimburse the candidate for travel to scientific meetings or to use in any other way the holder of the Award considers to be helpful in teaching or research in his department.

Nominations for Lederle Medical Faculty Awards should be submitted to the Committee through the Office of the Dean of the medical school and should be endorsed by him, and by the administrative head of the sponsoring department. Only one candidate from any school will be considered in any given year. It is suggested that the most suitable candidate be selected by an appropriate committee of the faculty.

The following information should be prepared

by the head of the department and transmitted with the nomination:

1. A curriculum vitae of the candidate;
2. A list of the candidate's publications, with complete citations and the names of co-authors, in the order in which they appear;
3. Information supporting the candidate's eligibility with an appraisal by the head of the department, of the candidate's prospect as a full-time teacher and investigator in one of the pre-clinical fields;
4. A general outline of the total program of departmental activities proposed for the candidate;
5. Reasons for requesting the support and a statement as to the ways in which the department will benefit by an Award;
6. A budget, giving the current and projected salary of the candidate and all their sources and indicating the manner in which the Award is to be used;

7. A completely executed nomination form (obtained on request to address below).

An independent statement from the individual who is recommended should be sent directly to the Committee.

Nominations for Awards to be activated during the academic year 1958-59 should be submitted by October 31, 1957. Announcements of the Awards will be made on or about February 1, 1958.

While no formal reports will be required, the Lederle Medical Faculty Awards Committee will be interested in the progress of each grantee.

Address all communications to:

LEDERLE MEDICAL FACULTY AWARDS
Office of the Secretary
Pearl River, New York

REFRESHER COURSES

The U. S. Public Health Service announces the following schedule of Laboratory Refresher Training Courses. Information and application blanks may be secured on request to the Laboratory Branch, Communicable Disease Center, U. S. Public Health Service, P. O. Box 185, Chamblee, Georgia

Laboratory methods in the diagnosis of parasitic diseases. Part 1. Intestinal parasites (8.00). Sept. 9-Oct. 4, 1957

Laboratory methods in the diagnosis of parasitic diseases. Part 2. Blood parasites (8.01). Oct. 7-Oct. 25, 1957

Laboratory Methods in the diagnosis of viral and rickettsial diseases (8.20).^{*} Oct. 14-Oct. 25, 1957, Mar. 10-Mar. 21, 1958 (repeat)

^{*} Courses 8.20, 8.21 and 8.26 will be presented at the Virus Laboratory, Montgomery, Alabama. All other courses listed will be given at the C.D.C. Laboratories in Chamblee, Georgia.

Laboratory methods in medical mycology. Cutaneous, Subcutaneous, and Systemic Fungi (8.15). Jan. 6-Jan. 24, 1958

Laboratory Methods in the Diagnosis of Tuberculosis (8.55). Jan. 20-Jan 31, 1958

Laboratory Methods in the Study of Pulmonary Mycoses (8.17). Feb. 3-Feb. 14, 1958

Laboratory Methods in the Diagnosis of Bacterial Diseases. Part 1. General Bacteriology (8.40). Feb. 10-Feb. 21, 1958

Laboratory Diagnostic Methods in Veterinary Mycology (9.40). Feb. 24-Feb. 28, 1958

Laboratory Methods in the Diagnosis of Bacterial Diseases. Part 2. General Bacteriology (8.41). Feb. 24-Mar. 7, 1958

Laboratory Methods in the Diagnosis of Bacterial Diseases, Enteric Bacteriology (8.50). Mar. 10-Mar. 21, 1958

Serologic Methods in the Diagnosis of Parasitic and Mycotic Infections (9.41). Mar. 10-Mar. 21, 1958

Laboratory Methods in the Diagnosis of Malaria (8.05). (2 weeks **)

Special Training in Virus Techniques (8.21*). (2 to 4 weeks**)

Typing of *Corynebacterium diphtheriae* (8.42). (1 week**)

Special Problems in Enteric Bacteriology (8.51). (2 weeks**)

Phage Typing of *Salmonella typhosa* (8.52). (1 week**)

Laboratory Methods in the Diagnosis of Leptospirosis (8.53). (1 to 4 weeks**)

Serologic Differentiation of Streptococci (8.54). (2 weeks**)

Bacteriophage Typing of Staphylococci (8.56). (2 weeks**)

SURVEY OF FOOD AND NUTRITION RESEARCH IN THE UNITED STATES OF AMERICA, 1952-1953

This survey, prepared by the Food and Nutrition Board of the National Research Council, provides a comprehensive listing of food and research projects which were active during part or all of the period between July 1, 1952, and June 30, 1953. It also lists the personnel associated with and the organizations supporting and/or conducting the reported research. An innovation to be found herein is a section devoted to new problems and unsolved problems of long standing submitted by contributors to the survey who felt that these were of particular urgency in the food and nutrition fields. Research conducted outside the territorial United States has been included if the work was supported by funds supplied by organizations within the United States.

Approximately half of the text is devoted to a listing of research projects, covering such subjects as nutritional requirements, digestion and metabolism, nutrition and disease, nutritional

** Courses given by special arrangement only.

status, analytical methods and bioassays, enzyme chemistry, food composition and nutritive value, factors influencing nutritive value, food technology, processing and storage, microbiology, food acceptance, and nutrition education. The last half of the book includes titles for suggested research, a personnel index, an organization index, a subject index to research projects, and an analysis of project distribution in food and nutrition research.

Published by the Department of Agriculture in 1954, this survey should provide information whereby research workers and administrators in the food and nutrition fields may communicate on problems of mutual interest. Limited supplies of this book are still available from the Superintendent of Documents at \$1.75 per copy. Checks and money orders should be made payable to Superintendent of Documents.

NEW DOCTORATE PROGRAM AT NEBRASKA

The Department of Bacteriology of the University of Nebraska has been authorized by the Graduate College of the University to offer the Ph.D. The Department staff consists of Instructor Floyd R. Schroeder, M.S., Nebraska; Associate Professors Warren E. Engelhard, Ph.D., Ohio State; Hilliard Pivnick, Ph.D., Michigan State and Thomas L. Thompson, Ph.D., Texas; and Professor Carl E. Georgi, Ph.D., Wisconsin, who also serves as Chairman.

NEW REGULATIONS ON SHIPMENT OF PATHOGENIC AGENTS

The Department of Health, Education and Welfare has revised its regulations covering interstate shipment of etiologic agents (Federal Register, Vol. 22, No. 32, page 954, dated February 15, 1957). Following is the complete text of the revision:

"Notice of proposed rule making having been published in the *Federal Register* on December 18, 1956, (21F. R. 10015), and consideration having been given to all relevant matters presented, the amendment to this part set out below is hereby adopted. Such amendment shall become effective 30 days following publication in the *Federal Register*.

Subpart C—Shipment of Certain Things is amended by adding the following new section:

72.25 Etiologic agents. (a) (1) For the purpose of this section, etiologic agent is defined as the causative agent of the following diseases and such others as may be prescribed from time to time by the Surgeon General: Anthrax, botulism, brucellosis, cholera, Colorado tick fever, Coxsackie diseases, diphtheria, encephalitis (arthropod-borne), glanders, leptospirosis, lymphocytic choriomeningitis, melioidosis, meningococcal meningitis, paratyphoid fever, plague, polio-

myelitis, Q fever, rabies, relapsing fever, rickettsialpox, Rift Valley fever, Rocky Mountain spotted fever, schistosomiasis, scrub typhus, smallpox, tetanus, tuberculosis, tularemia, typhoid fever, typhus fever and yellow fever.

(2) The provisions of this section shall not apply to specimens transmitted to laboratories for diagnostic purposes or to finished biological products for human or veterinary use bearing the U. S. Government license number of the manufacturer.

(b) A person shall not knowingly transport or cause to be transported in interstate traffic any etiologic agent unless:

(1) In the case of fluid materials or solid materials other than frozen, the containers of the etiologic agent are watertight and airtight and are enclosed in a second durable watertight and airtight container with the intervening space provided with sufficient absorbent material so placed as to absorb the entire contents in case of breakage, and each such double container is individually enclosed in a shipping container constructed of corrugated cardboard, fiber glass, wood, or other material of equivalent strength.

(2) In the case of frozen materials, the containers of the etiologic agent are watertight and airtight and are enclosed in a second durable watertight and airtight container or surrounded by sufficient absorbent material to absorb the contents in case of breakage; the package contains enough dry ice and sufficient insulation material to insure that the material will remain frozen for at least 24 hours longer than the expected time of delivery of the shipment to the consignee; and the container with its immediate surrounding material, dry ice and insulation is enclosed in a shipping container constructed of corrugated cardboard, fibre glass, wood, or other material of equivalent strength.

(3) (i) The total contents of a shipping container do not exceed one U. S. gallon.

(ii) All containers and closures are so designed and constructed of such materials that they are capable of withstanding without rupture or leakage of contents, all shocks, pressure changes, or other conditions ordinarily incident to transportation handling.

(4) The shipping documents and the manifest accompanying the shipment include statements that the shipment contains infectious material and identifies the etiologic agent involved. The shipment itself shall be appropriately labeled.

(5) The requirements of this paragraph are in addition to and not in lieu of any other packaging or labeling requirements for the interstate shipment of etiologic agents established by the Interstate Commerce Commission and Civil Aeronautics Board.

(c) In event of leakage or other indication of escape of an etiologic agent from a container in interstate traffic, the operator or person in charge of the conveyance or the premises where the leakage or escape occurs shall:

(1) Immediately notify the Surgeon General or his authorized representative.

(2) (i) If leakage or escape occurs on a conveyance, remove the conveyance from service and isolate it as soon as possible. Isolate the affected area until such time as the conveyance can be removed from service.

(ii) If leakage or escape occurs at a terminal, transfer point, or other location not on a conveyance, isolate the area known to be or suspected of being contaminated.

(3) Prevent removal of any luggage, cargo, or other items from the affected area or conveyance unless such removal is necessary for purposes of safety or the preservation of life, health, or property.

(4) Inform all passengers, carrier employees and other persons who were or may have been exposed to contamination or infection, of the hazards thereof and request that such persons remain isolated until appropriate measures can be taken to prevent the transmission of disease. In event any such person departs before appropriate decontamination procedures have been applied, notify the State or local health authorities having jurisdiction.

(5) Obtain names, home addresses and addresses of destination of all persons who may have been exposed to contamination or infection.

(6) Apply appropriate decontamination procedures and other measures as specified by the Surgeon General or his authorized representative.

(7) Except when necessary for purposes of safety or the preservation of life, health or property, or for purposes of decontamination, prevent persons from boarding the conveyance or entering the area until clearance is obtained from the Surgeon General or his authorized representative.

(d) Isolation of the conveyance or affected areas shall be continued pending completion of measures prescribed by the Surgeon General for preventing the spread of disease and until such time as clearance is obtained from the Surgeon General or his authorized representative.

(e) In the event of loss of a shipment of etiologic agents in transit, the carrier shall immediately notify the Surgeon General or his duly authorized representative of such loss and provide him with all available information concerning the nature of the shipment, circum-

stances surrounding its loss and such other information as he may require."

Dated: February 4, 1957

L. E. BURNEY
Surgeon General

Approved: February 12, 1957

M. B. FOLSOM
Secretary

SAFETY EDUCATION FOR MICRO- BIOLOGISTS

Although microbiologists have been aware for many years of the hazards attending their profession, systematic study, evaluation and correction of these hazards is a development which has received accelerated attention during the past 10 years. Great progress has been made toward analyzing techniques and examining equipment which may be responsible for infecting laboratory workers and toward devising safe working procedures. Surveys have been made indicating the frequency with which occupational illnesses among laboratory workers occur. Several papers have appeared giving information concerning the infectious hazards peculiar to certain types of research or to certain procedures or equipment. Industrial firms have been aware of these developments and a variety of equipment is now commercially available to reduce or eliminate hazards associated with various techniques. An outstanding example is the microbiological safety cabinet which is being used more and more to replace the open table top for hazardous operations. The design of new laboratories for work on infectious diseases has also received attention and many laboratories being built throughout the country are designed with specific safety features such as air filters, cabinet systems and ultraviolet radiation. That there is considerable professional interest in microbiological safety is indicated by the formation in October 1950 in the American Public Health Association of the Committee on Laboratory Infections and Accidents. Of some influence in the development of microbiological safety has been the recognition under workmen's compensation laws of certain occupational hazards, such as serum hepatitis among medical and laboratory personnel.

For those who will agree that microbiologists and others who work with infectious microorganisms should be given every opportunity to protect themselves from acquiring occupational diseases, the question should be asked: Should safety training in the hazards associated with handling highly virulent microbes be included in the undergraduate college curriculum?

In a recent article discussing trends in microbiology (1) Roger D. Reid stated, "More and more contemporary scientists who are not microbiologists are turning to microbes as tools in

working out answers to fundamental problems. . . . The use of microbes by other groups presents an added responsibility to bacteriologists. They must see to it that these people have an acceptable working knowledge of basic microbiological techniques. . . . This emphasizes the importance of a good teaching program in microbiology."

To omit the handling of infectious cultures by students of bacteriology in order to avoid student infections is begging the question if the student, after graduation, finds himself in the position of using "non-pathogen" techniques for the handling of infectious cultures.

A recent editorial in *The Lancet* (2) commented on current knowledge about hazards arising from a variety of bacteriological techniques and corrective measures that have been suggested, and recommended that "...in the absence of a murrain among the bacteriologists, it will probably be wise to assemble a little more information before these are instituted in whole or in part." The author stated, however, that "...so long as the bacteriologist wears the same white coat (with or without buttons) for work, for tea and for an hour in the library he is falling below the standard which he preaches to the surgeons."

Nevertheless many will recommend, and particularly those who have contracted tuberculosis or brucellosis in the laboratory, that it is not in keeping with the present ideals of medicine, public health or bacteriology to study situations and institute corrective changes only when the tempo reaches that of a pestilence. Therefore as long as laboratory workers are being needlessly infected while equipment and techniques exist which will reduce the hazard, and as long as important work with some disease organisms is prohibited in many laboratories because of the risks involved, any suggestion to wait for additional information is again begging the question.

It is freely admitted that more information concerning laboratory hazards and their correction should be obtained. Many more studies should be done to evaluate risks occurring in particular areas, for example, the risks involved in experimentation with infected laboratory animals. A review of current literature, however, will show that enough accurate information is presently available on the hazards of common bacteriological techniques to warrant some attention by all persons who handle infectious disease organisms. Should not this information also be made available to those who will be the bacteriologists of tomorrow?

G. BRIGGS PHILLIPS

- (1) Reid, Roger D., Trends in Microbiology, A.I.B.S. Bulletin, No. 1956.
- (2) Laboratory Infections (an editorial), *The Lancet*, Oct 27, 1956, 880-881.

NEWS ABOUT OUR MEMBERS

Harry E. Goresline, Associate Scientific Director, Quartermaster Food and Container Institute for the Armed Forces, Chicago, Illinois, has received the 1956 Research Achievement Award of the Poultry and Egg National Board, for outstanding scientific effort in the poultry and egg fields.

David B. Sabine of the U. S. Vitamin Corporation has been elected to Honorary Life Membership in the Metropolitan Microchemical Society.

James C. Landes has accepted a position as bacteriologist in Eli Lilly and Company's biological development department. His work at the Lilly Biological Laboratories in Greenfield is in development of biological products, and in biological production.

After more than 30 years active duty with the U. S. Army, Colonel Francis E. Council has been placed on the retired list of the Medical Corps. Colonel Council has moved to Fort Worth, Texas, where he will serve as a pathologist in the Fort Worth Medical Laboratories.

Roger D. Reid has been named Director of the Biological Sciences Division of the Office of Naval Research, effective June 1, 1957. Dr. Reid will continue to serve as Head of the Microbiology Branch of the Biological Sciences Division, a position he has held since 1948.

Professor Vezeaux de Lavergne, a corresponding member of the Society since 1953, died on March 21, 1957. Professor de Lavergne retired as head of the Department of Bacteriology of the Medical Faculty of Nancy, France, in 1955.

On July 1, 1957, Bernard D. Davis became Professor of Bacteriology and Immunology at Harvard University and Head of the Department of Bacteriology and Immunology in the Harvard Medical School. Dr. Davis moved to Harvard from the Department of Pharmacology at the New York University College of Medicine.

Waclaw Szybalski, professor of microbial genetics at the Institute of Microbiology of Rutgers University, has been elected an honorary member of the Italian Society for Experimental Biology. Professor Gino Berhami of Rome, President of the Society, announced the selection for "illustrious work in experimental genetics on microbial resistance to antibiotics and pioneering work on genetics of bacteria and streptomyces."

Stanley G. Knight, associate professor of bacteriology at the University of Wisconsin, has been named winner of a \$200 award and honor plaque by the Glycerine Producers association for his research establishing triacetin as a fungicide. Dr. Knight also was one of the developers of "Nuworld" cheese.

Robert C. Millonig, formerly Research Associate

in the Department of Microbiology, Johns Hopkins University School of Hygiene and Public Health, has accepted a position as Research Associate in the Biochemical Division of the Squibb Institute for Medical Research, New Brunswick, New Jersey.

Edward J. Herbst has been named to succeed Robert C. Millonig as President of the Maryland Branch. Dr. Herbst is in the Department of Biological Chemistry, University of Maryland School of Medicine, Baltimore.

Robert B. Lindberg, Lt. Col. MSC, is being transferred in August 1957 from his post as Chief of the Department of Bacteriology at the Walter Reed Army Institute of Research, to Europe, where he is scheduled to head the Bacteriology Laboratory of the USAREUR Medical Laboratory in Landstuhl, Germany. Dr. Lindberg has studied enteric pathogens and anaerobic wound infections during six years of overseas service in the Central Pacific and Far East areas, and plans to emphasize study of enteropathogenic coliforms and of Shigellae in Europe.

FRED WILBUR TANNER

1888-1957

Professor Fred Wilbur Tanner died Sunday, February 24, 1957, at his home in Winter Park, Florida, after a prolonged illness.

Tanner received his B.S. degree from Wesleyan University, Middletown, Connecticut, in 1912. The University of Illinois awarded him a master's degree in 1914 and a Ph.D. in 1916. Because of his outstanding contributions to the field of Public Health, Wesleyan University named him an honorary Doctor of Science in 1943.

After serving as Bacteriologist in the Illinois State Water Survey, Professor Tanner joined the staff of the Department of Bacteriology at Illinois in 1915 and became its first head in 1921. He served in this capacity until 1948, when illness forced him to retire. It was under his capable leadership that the department developed.

Tanner's early interest was in yeasts. The Tanner collection of yeast cultures became part of the American Type Culture Collection, and at one time probably was the largest in the country. His interest in this group of microorganisms resulted in a translation from the French of Guillermond's "The Yeasts," which was a tremendous aid to American scholars.

Most of Professor Tanner's research was in Food Bacteriology, in which he was a recognized authority throughout the world. He was an author of several books. An elementary text titled "Bacteriology" and an accompanying laboratory manual ran through four editions. "Microbiology

of Foods" and "Food Borne Infections and Intoxications" were used as reference texts in many universities.

In 1952 Professor Tanner received the Stephen M. Babcock award by the Institute of Food Technologists for outstanding contributions to food technology. He had previously served as president of the Institute. He was the founder and editor-in-chief of *Food Research*. He was active in the S.A.B. and helped establish the Society of Illinois Bacteriologists, becoming its first president.

Plans are being made for a memorial to Professor Tanner in the form of a portrait to be hung in the Department of Bacteriology when the new Biology Building quarters are completed. Friends and former students are invited to contribute. Checks and money orders made payable to the Tanner Memorial Fund should be sent to:

DR. FRANCIS M. CLARK, *Treasurer*
Tanner Memorial Fund
726 S. Foley Street
Champaign, Illinois

RHODA W. BENHAM

1895-1957

Dr. Rhoda W. Benham, medical mycologist and Associate Professor of Dermatology at Columbia University, died at her home in Cedarhurst, Long Island, New York, on January 17, 1957, after a year and a half of ill health and six months' retirement from active academic duties.

With the late Dr. J. Gardner Hopkins, Dr. Benham had organized and developed at Columbia a research laboratory for the study and teaching of medical mycology, the first in the United States. Her fundamental research on many of the fungi pathogenic to man, including their morphology, nutrition and serology, had established her as a leading world authority, and in many instances a pioneer, in this field. Many other prominent medical mycologists of today were trained in her laboratories.

A distinguished member of several professional societies, Dr. Benham was also for many years, a member of the Society of American Bacteriologists.

LOCAL BRANCH ACTIVITIES

LOCAL BRANCH OFFICERS

Corrections and Additions

Since the lists of officers for 1957 were compiled for publication in the January, 1957, issue of *Bacteriological News*, the following changes, additions, and corrections have been reported to the Secretary's office:

Southern California Branch

President, MILO DON APPLEMAN, University of Southern California, Los Angeles 7, California

New York City Branch

President, P. C. EISMAN, CIBA Pharmaceutical Products Co., Summit, N. J.

Vice President, GERARD VAN HALSEMA, Pfizer Therapeutic Institute, Maywood, N. J.

Recording Secretary, J. S. KISER, Res. Div., Am. Cyanamid Co., Pearl River, New York

Corresponding Secretary, H. CHRISTINE REILLY, Sloane-Kettering Institute for Cancer Res., 112 Pacific Street, Brooklyn 1, New York

Treasurer, MURRAY S. COOPER, Lederle Laboratories, Pearl River, New York

Councilor, BEATRICE SEEGAL, 630 West 168th Street, New York, New York

South Central Branch

President, R. J. BIENVENU, Northwestern State College, Natchitoches, La.

Vice President, H. BAER, Microbiology Dept., Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, La.

Secretary-Treasurer, R. J. STRAWINSKI, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

Councilor, A. R. COLMER, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

Southeastern Branch

President, MARY NOKA HOOD, Department of Bacteriology, Florida State University, Tallahassee, Florida

Vice President, ELAINE L. UPDYKE, 5605 Central Drive, R.D. 3, Stone Mountain, Georgia

Secretary-Treasurer, ANNE LOUISE PATES, Department of Bacteriology, Florida State University, Tallahassee, Florida

Councilor, John W. Foster, University of Georgia, Athens, Georgia

Connecticut Valley Branch

Secretary Treasurer, ELIZABETH D. ROBINSON, Burton Hall, Smith College, Northampton, Massachusetts.

*New Jersey Branch—Officers for 1957-58
elected June 6, 1957*

President, WERNER BRAUN, Institute of Microbiology,
Rutgers University, New Brunswick, N. J.
Vice-President, RALPH BENNETT, E. R. Squibb & Sons,
New Brunswick, N. J.
Secretary, MADEON R. GRIMM, CIBA Pharmaceutical
Products Inc., Summit, N. J.
Treasurer, DAVID PRAMER, Rutgers University, New
Brunswick, N. J.
Councilor, DAVID HENDLIN, Merck & Co., Rahway,
N. J.

Maryland Branch

President, E. J. HERBST, Department of Biological
Chemistry, University of Maryland School of
Medicine, Baltimore, Maryland.
Secretary-Treasurer, B. J. DEMBECK, JR., Baltimore
Biological Laboratories, 1640 Gorsuch Avenue,
Baltimore 18, Maryland.

VIRGINIA BRANCH AWARD

The first annual award for the outstanding
exhibit on microbiology at the annual Virginia
Junior Academy of Science meeting held in con-
junction with the Virginia Academy of Science
was made this year on May 11, 1957.

The award was made with the following presen-
tation:

"To stimulate interest and to illustrate the
wonders and opportunities in the fields of micro-
biology, the Virginia branch of the Society of
American Bacteriologists has established an
annual award of \$25.00 and a certificate to the
individual presenting the outstanding exhibit at
the annual Junior Academy of Science meeting.
A certificate will also be issued to the teacher
sponsoring the winner. Appropriate certificates of
Honorable Mention will be awarded when indi-
cated.

The members of the Virginia Branch of the
Society of American Bacteriologists stand ready
to assist all students and science teachers in plan-
ning projects and in furnishing any assistance. We
urgently request you to avail yourselves of this
opportunity.

The award is given for originality of thought,
clarity and method of presentation. The winner
of the first award is Kathryn Page Smith of the
Newport News High School for the presentation
"Phosphorous as a nutrient in marine water for
the growth of *Chlorella*." Her sponsor is Mr. Mays.

Honorable mention is awarded to Wilfreta
Gourdine of the I. C. Norcom High School in
Portsmouth for her presentation "Transforming of
Bacteria." Her sponsor is Mrs. M. A. Parham.

My congratulations to the winners and I trust

that we will have double the entries next year for
this annual award."

Two other exhibits were considered in making
the awards:

1. "A Study of Fluids of the Common Roach,"
by Gail Criss of the Martinsville High School—
Sponsor, Mrs. Ver Webster.

2. "The Culture of Chick Embryo Heart Tissue
Outside the Organism," by Jim Baird of the
William Fleming High School in Roanoke—
Sponsor, Mrs. Ruth Painter.

DACK WINS 1957 PASTEUR AWARD

The Society of Illinois Bacteriologists named
Dr. G. M. Dack this year's winner of its Pasteur
Award, which is presented annually to an out-
standing Midwestern Bacteriologist. Dr. Dack,
who is Director of the Food Research Institute at
the University of Chicago, was cited for his out-
standing contributions to food bacteriology, es-
pecially with regard to the etiology of food poison-
ings.

The Award was presented at a dinner meeting
of the Illinois Branch on May 11, 1957. Dr. Dack's
award lecture was titled "Staphylococcus Entero-
toxin."

MARYLAND BRANCH AWARDS

The Maryland Branch of the Society of Ameri-
can Bacteriologists announces with pride the
winners of their annual awards presented in honor
of J. Howard Brown and Barnett Cohen.

Dr. C. Alfred Perry, Chief of the Bureau of
Laboratories, Maryland State Department of
Health, was presented the Barnett Cohen Award,
given annually to the Maryland professional
scientist whose work is adjudged most outstanding
by the state S.A.B. Awards Committee.

The J. Howard Brown award given annually
to the student bacteriologist judged most out-
standing, was presented to Anne Estelle Rider,
Research Assistant at the University of Maryland,
Department of Medicine.

Dr. Perry was cited for his high regard for and
insistence on the maximum accuracy possible in
laboratory tests and his philosophy that the wel-
fare of the public should be uppermost in the
minds of all laboratory workers. Dr. Perry earned
his Bachelors Degree at Rutgers College in 1921
and his Doctorate of Science from Johns Hopkins
University in 1930. He has worked for the De-
partment of Health since 1923.

Miss Rider, a graduate of Notre Dame College
of Baltimore, was cited for her studies on the
effects of ultraviolet lighting on the growth cycle
of bacteria.

The material reward, commemorating this
occasion, is an engraved citation and one year

membership to the National and Local Society of American Bacteriologists.

NEW JERSEY BRANCH CAREER COMMITTEE

In an effort to help its younger members and to stimulate greater interest in bacteriology as a career, the New Jersey Branch has organized a "Career Committee." This Committee will formulate and implement a program directed toward helping high school and college students choose and pursue a career in bacteriology. Ways in which branch members can help in the program include:

1. Work closely with local high schools and colleges in their career conference programs.
2. Provide speakers, literature and publicity.
3. Arrange consultations in regard to studies and employment opportunities.
4. Sponsor contests.
5. Help in the programming of high school biology and chemistry clubs.
6. Provide an opportunity for students to work or observe in various laboratories.

REPORTS FROM LOCAL BRANCH MEETINGS

Northern California and Hawaii Branch

(J. L. Stokes, Secretary-Treasurer)

April 23, 1957. The Branch met at the State Health Department in Berkeley to hear:

1. Studies on interaction between monocytes and tubercle bacilli. J. Fong and S. S. Elberg, Department of Bacteriology, University of California, Berkeley.
2. Effect of 7-azatryptophane on formation of enzymes and viruses by *E. coli*. Arthur B. Pardee and Louise Prestidge, Virus Laboratory, University of California, Berkeley.
3. Urinary leptospiral antibodies and chronic nephritis in dogs. Ernst L. Biberstein, School of Veterinary Medicine, University of California, Davis.
4. Screening for substances which reduce the thermal resistance of spores. H. David Michener, P. A. Thompson, and J. C. Lewis, Western Regional Laboratory, U.S.D.A., Albany.

Southern California Branch (Dean A. Anderson, Secretary-Treasurer)

March 29, 1957. The Branch met at Los Angeles State College to hear:

1. The degradation of ergothioneine by bacteria. D. Yonasugondha and M. D. Appleman, Department of Bacteriology, University of Southern California.
2. Lysogeny in *Listeria*. C. P. Sword and M. J.

Pickett, Department of Bacteriology, University of California, Los Angeles.

3. Simple selective media for *Bacteroides* and other anaerobes. S. M. Finegold, L. A. Siewert, and W. L. Hewitt, Department of Medicine, University of California, School of Medicine, Los Angeles.

4. Some characteristics of the *Pseudomonas-Achromobacter-Alcaligenes* group. H. B. Moore, M. J. Pickett, and R. E. Hoyt, Department of Bacteriology, University of California, Los Angeles, and Cedars of Lebanon Hospital.

5. A comparison of Loewenstein-Jensen medium and Christensen-Leach medium. J. E. Forney, B. L. Hall, and C. F. Pait, Laboratory Division, Los Angeles City Health Department.

6. The specific cytotoxic activity of brucellergen in tissue culture. D. Heilman, D. Howard, and C. M. Carpenter, Department of Infectious Diseases, University of California, School of Medicine, Los Angeles.

7. The prevalence of *Brucella* agglutinins in the serum of patients with biologic false positive reactions for syphilis. C. M. Carpenter, J. N. Miller, and J. Keatsman, Department of Infectious Diseases, University of California, School of Medicine, Los Angeles.

May 11, 1957. City of Hope, Duarte, California, was the site of the May meeting.

1. An epidemiologic story. A. S. Browne, Bacteriology Laboratory, State Health Department, Berkeley.

2. The role of vitamin B₆ in the loss of cellular constituents by *L. arabinosus*. J. T. Holden, City of Hope, Duarte.

3. Studies on the internal environment of *Leptospira canicola*. M. Gerhardt, Department of Bacteriology, University of California, Los Angeles.

4. Cytological studies of phage infection in Mycobacteria: II. Continuous phase-contrast observations. S. Shadomy, S. Froman, and M. J. Pickett, Department of Bacteriology, University of California, Los Angeles, and Olive View Sanatorium, Los Angeles.

5. Homologous interference with Newcastle Disease Virus. M. A. Baluda, Department of Microbiology, City of Hope, Duarte.

6. WHO Regional Training Course in Rabies. C. F. Pait.

7. Certain microbiological problems in modern food technology, Dr. A. A. Mossel, Central Institute for Nutrition Research, Council for Applied Scientific Research in the Netherlands.

Connecticut Valley Branch (Elizabeth D. Robinton, Secretary-Treasurer)

April 26, 1957. The Spring meeting was held at Yale University, New Haven, Connecticut.

1. Studies in the pathogenesis of fever. Elisha Atkins, Department of Medicine, Yale University.

2. The *in vitro* sensitivity of *Candida albicans*. Florence Hood, University of Massachusetts, Amherst, Mass.

3. Assay of the factor in yeast autolysates essential for glucose oxidation by *Acetobacter gluconicum*. Charles L. Goldman, University of Massachusetts, Amherst, Mass.

**South Florida Branch (F. J. Roth, Jr.,
Secretary-Treasurer)**

March 11, 1957. The winter meeting of the South Florida Branch was held at the Miami Springs Villas. Dr. Robert J. Huebner, Director, Infectious Disease Laboratory, National Institutes of Health, spoke on "Current Research on the Utilization of Viruses for Treatment of Cancer."
May 25, 1957. The spring meeting was at the University of Miami School of Medicine.

1. Microbiologic problems in the injection of local dental anesthetics. Murray M. Streifeld and D. D. Zinner, National Children's Cardiac Hospital.

2. Laboratory diagnosis of infectious mononucleosis. Samuel L. Ettman, Barry College.

3. Lethality of cell-free extract of *Candida albicans* for chlortetracycline-treated mice. Frank J. Roth, Jr., Department of Bacteriology, University of Miami School of Medicine.

4. A study of viral agents recovered from the intestinal tract of monkeys. Warren Hoffert, Florida Department of Health Laboratory.

5. Interference in experimental Poliomyelitis. Murray Sanders, Manual Soret and Benjamin Aiken, Microbiological Laboratory, University of Miami.

6. The synthesis of nucleic acid pentoses in *E. coli*. Mary C. Lanning, Department of Bacteriology, University of Miami School of Medicine and Variety Children's Hospital.

Illinois Branch (C. J. Rickher, Secretary)

May 11, 1957. The Branch met at the Edgewater Beach Hotel for afternoon and evening programs. Highlight of the evening session was presentation of the Annual Pasteur Award to Dr. G. M. Dack, former President of the Society. This award is given annually to an outstanding Midwestern bacteriologist. Dr. Dack's award lecture was titled "Staphylococcus Enterotoxin." The following papers were presented during the early afternoon:

1. Studies on developing and mature forms of feline pneumonitis virus in the chorio-allantoic ectoderm infected by a new chick embryo inoculation technique. Jack Litwin, Dept. of Microbiology, University of Chicago, Chicago, Ill.

2. Studies on the cell walls of group A, hemolytic streptococci. J. A. Hayashi and S. S. Barkulis,

University of Illinois, College of Medicine, Chicago.

3. The development of resistance to a quinoxaline-N-oxide in feline pneumonitis virus. Rima M. Axelrod, Dept. of Microbiology, University of Chicago, Chicago, Ill.

4. Relationship between p-Aminobenzoic Acid and Pteroyl Glutamic Acid in the nutrition of two strains of *Rhodotorula*. F. M. Clark, Dept. of Bacteriology, University of Illinois, Urbana, Ill.

5. Nutritional and physical factors affecting the germination of *Microsporium audouinii* on infected hairs. John W. Rippon, University of Illinois, College of Medicine, Chicago, Ill.

6. Population changes associated with apparent changes in the respirational phenotype in yeasts. Maurice Ogur, Ralph St. John and Sylvia Ogur. Biol. Res. Lab., Southern Illinois University, Carbondale, Ill.

7. The sterilization of plastic intravenous injection equipment by ethylene oxide vapor. E. J. Rdzok, W. E. Grundy, W. J. Remo, H. E. Sagen, and J. C. Sylvester, Abbott Labs., Res. Div., North Chicago, Illinois.

8. Chlorpromazine as a metabolic inhibitor. R. D. DeMoss and N. R. Evans, Department of Bacteriology, University of Illinois, Urbana, Illinois.

9. Isolation of salmonellae from food samples. W. I. Taylor and J. H. Silliker, Swift & Co., Res. Labs., Chicago, Illinois.

10. A new non-destructive method for the sampling of meats. H. P. Andrews, J. H. Silliker, and J. F. Murphy. Swift & Co., Res. Labs., Chicago, Illinois.

11. Isolation of salmonellae from food samples. Part II. W. I. Taylor and J. H. Silliker, Swift & Co., Res. Labs., Chicago, Illinois.

12. *In vitro* studies on methanogenic rumen bacteria. R. A. Opperman, W. O. Nelson and R. E. Brown, Dept. of Dairy Science, University of Illinois, Urbana, Illinois.

13. Enumeration of viable tubercle bacilli from the organs of experimentally infected normal and immunized mice. John L. Sever and Guy P. Youmans, Dept. of Bacteriology, Northwestern University, Medical School, Chicago, Ill.

14. Adaptive alpha-glucosidases in *Saccharomyces*. C. C. Lindegren, Biol. Res. Lab., Southern Illinois University, Carbondale, Ill.

15. A simple fluid medium for diphasic fungi. Shirley McMillen, Hektoen Institute for Med. Res. of Cook County Hospital, Chicago, Ill.

16. The secretion of DNA by viable bacterial cells. Frank E. Halleck, Loyola University, Department of Biol. Sciences, Chicago, Illinois.

Later, H. H. Shaughnessy convened a symposium on "Public Health Aspects of Food Processing and Distribution." Speakers and their subjects were:

1. Some public health implications in subsistence specification requirements. Harry Goresline, QM Food and Container Institute, Chicago, Ill.

2. Combined irradiation and heat processing in canned foods, 1. cooked ground beef inoculated with *Cl. botulinum* 213 B spores. Lloyd Kempe, Univ. of Michigan, Med. School.

3. Public health aspects of non-processed foods in metal containers. C. F. Schmidt, Continental Can Company, Chicago, Illinois.

4. Occurrence, identity, and significance of enterococci in meat foods. C. F. Niven, Jr., American Meat Institute Foundation, Chicago, Illinois.

5. The significance of bacterial counts in food processing. R. V. Hussong, Kraft Foods, Inc., Glenview, Illinois.

Intermountain Branch (Paul B. Carter, Secretary)

April 20, 1957. The twentieth semi-annual meeting of the Intermountain Branch was held at the Brigham Young University Campus, Provo, Utah. The following scientific papers were presented:

1. Studies on the immune response to experimental infection and immunization with *Endamoeba histolytica*. Sister M. Ann Josephine, University of Utah.

2. The classification and sensitivities to chemotherapeutic agents of chromogenic acid-fast bacilli. Marvin Rogul, Robert Keller, and Victor J. Cabelli, Dugway Proving Grounds.

3. The path of glutamate fermentation by *Clostridium tetanomorphum*. H. A. Barker, Biochem. and Virus Laboratory, University of California.

4. Skin test activity of specific polysaccharides from *Histoplasma capsulatum*. Ralph A. Knight and Stanley Marcus, University of Utah.

5. Report of a Q fever survey in Utah. Carl Blank, Utah State Health Department.

6. The role of preformed antibody in protection of irradiated mice against infection. Eugene H. Perkins and Stanley Marcus, University of Utah.

7. The role of mosquitoes in staphylococcal synovitis. John R. Molenda, Paul B. Carter, and W. W. Smith, Utah State University.

8. Studies on aerosols of lyophilized *Serratia marcescens* under controlled conditions. Robert L. Dimmick and Melvin T. Hatch, University of California and University of Utah.

9. Some factors influencing denitrification. L. W. Jones, Utah State University.

10. The protein utilization of growing cells in tissue culture. John G. Bachtold, University of Utah.

11. Effects of extracts of phagocytes on soluble antigens. George T. Manilla and Stanley Marcus, University of Utah.

12. Further studies of the attachment mecha-

nism of polio virus. H. Curt Bubel and John G. Bachtold, University of Utah.

13. Alternations in spleen DNAase activity following intravenous injection of viable microorganisms and DNA. Frank Tidwell, Beverly Orton and David M. Donaldson, Brigham Young University.

Maryland Branch (B. J. Dembeck, Jr., Secretary-Treasurer)

March 6, 1957. The Branch met at Johns Hopkins School of Hygiene and Public Health to hear a talk on "Microbiologic and other Scientific Procedures in the Investigation of Sudden Death" by Dr. Russell S. Fisher, Chief Medical Examiner of the State of Maryland.

April 6, 1957. The Branch met at Fort Detrick, Maryland, for afternoon and evening programs with 103 members and guests in attendance. Professor Phillip C. Trexler, Notre Dame University, spoke to the group at the evening session on "Techniques of Rearing and Using Germfree Animals." The evening program also included presentation of the annual J. Howard Brown and Barnett Cohen achievement awards.

1. Automatic counting of bacterial cultures—a new machine. N. E. Alexander and D. P. Glick, Fort Detrick, Frederick, Maryland.

2. An evaluation of an automaton for bacteriologists. D. N. Lapedes, J. E. Malligo, and L. S. Idoine, Fort Detrick, Frederick, Maryland.

3. Studies on continuous sampling of *Serratia marcescens* using a modified slit sampler. R. W. Kuehne and H. M. Decker, Fort Detrick, Frederick, Maryland.

4. Immunologic response of man to purified bivalent AB Botulinum Toxoid. Mary A. Fick, L. F. Devine, J. T. Duff and G. G. Wright, Fort Detrick, Frederick, Maryland.

5. Phagocytosis and opsonization of Typhus Rickettsiae. J. Gould, R. Swanson, and C. L. Wisseman, Jr., Department of Microbiology, University of Maryland, School of Medicine, Baltimore, Maryland.

6. Studies on the participation of complement in passive cutaneous anaphylaxis. Mary Hawrisiak, Department of Microbiology, School of Hygiene and Public Health, Baltimore, Maryland.

7. A rapid method for determining the antibiotic sensitivity of *Mycobacterium tuberculosis* H37Ra. A. Pital, R. E. Cooper, and J. M. Leise, Fort Detrick, Frederick, Maryland.

8. Colicine Sensitivity patterns of *Shigella boydii* Serotypes. Mary L. Robbins, L. W. Parr, and N. S. Ikari, George Washington University, School of Medicine, Washington, D. C.

9. Cytologic observations on the germination of *Clostridium perfringens* spores. A. G. Smith and Elizabeth Heinz, Department of Microbiology,

University of Maryland, School of Medicine, Baltimore, Maryland.

10. Botulinal hemagglutinin response to the presence of proteolytic enzymes. E. A. Meyer, and C. Lamanna, Department of Microbiology, School of Hygiene and Public Health, Baltimore, Maryland.

11. Growth of Venezuelan Equine Encephalomyelitis virus in monolayer and fluid suspension culture of L cells. F. M. Hardy, and A. Brown, Fort Detrick, Frederick, Maryland.

New Jersey Branch (Theobald Smith Society; Madelon Grimm, Secretary)

March 21, 1957. The sixth annual Banquet Meeting was held at the Oak Hills Manor, Metuchen, New Jersey, under the chairmanship of Dr. Wacław Szybalski, Institute of Microbiology, Rutgers University. The fourth Selman A. Waksman Honorary Lectureship Award was presented to Dr. Wayne W. Umbreit, Merck Institute for Therapeutic Research, in recognition of his outstanding contributions to the field of microbiology in general and particularly for his efforts in the field of microbial cartography. The award takes the form of a suitably engraved medal and a check for \$100.00. Dr. Umbreit's speech entitled "Speculations on Bacteriology" followed the presentation of the award by Dr. Robert L. Starkey.

April 11, 1957. The meeting was held at Hoffmann-La Roche, Inc., Nutley, New Jersey. Dr. A. B. Kupferberg, Ortho Research Foundation, Raritan, New Jersey, was chairman of a symposium on "Protozoa."

1. Some nutritional peculiarities of Protozoa. S. H. Hutner, Haskins Laboratories, New York City.

2. Agglutination of parasitic protozoa. L. A. Stauber, Rutgers University.

3. Nutrition of a hemoflagellate having an interchangeable requirement for choline or pyridoxal. W. Trager, Rockefeller Institute, New York City.

June 6, 1957. Dr. Elvin A. Kabat, Columbia Presbyterian Medical Center, New York City, addressed the Branch on "The Size of the Combining Site on an Antibody Molecule." The meeting was held at Douglass College, New Brunswick, and was followed by a picnic supper at Rutgers University Log Cabin.

Eastern New York Branch (Sally M. Kelly, Secretary-Treasurer)

May 16, 1957. The Spring meeting of the Branch was held at the Veterans Administration Hospital in Albany, New York.

1. Glucose metabolism of a growing culture of *Bacillus megaterium*. Irwin H. Segel and Henry L. Ehrlich, Departments of Chemistry and Biology, Rensselaer Polytechnic Institute, Troy.

2. The effect of adenosine triphosphate on dinitrophenol inhibition of *Escherichia coli*. Joseph Landau and Charles Hurwitz, Veterans Administration Hospital, Albany.

3. Observations on a radiation resistant pigmented *Sarcina* sp. R. E. Kilburn, Stephanie A. Terni and W. D. Bellamy, General Electric Research Laboratory, Schenectady.

4. Monkey heart-cell cultures as a replacement for monkey kidney-cell cultures. Johan Winsser and Inez Sherman, Division of Laboratories and Research, New York State Department of Health, Albany.

5. Introduction of New Laboratory Animals. Johan Winsser, Division of Laboratories and Research, New York State Department of Health, Albany.

6. Recent advances in serologic diagnosis of syphilis using treponemal antigens. John K. Miller, Division of Laboratories and Research, New York State Department of Health, Albany.

New York City Branch (J. S. Kiser, Secretary)

March 26, 1957. The 77th Meeting was held at Memorial Center Auditorium, 444 East 68th Street, New York City, with a program on Marine Microbiology.

1. Introductory Remarks. Seymour H. Hutner, Haskins Laboratories.

2. Some Microbiological Studies of Inshore Waters. Paul Burkholder, Brooklyn Botanic Garden.

3. Nutritional Studies on Marine Microalgae. J. J. A. McLaughlin, Haskins Laboratories.

North Carolina Branch (Mary A. Poston, Secretary-Treasurer)

April 13, 1957. The Branch met at Duke University School of Medicine to hear the following program:

1. The treated pulmonary lesion and its tubercle bacillus-drug susceptibility studies. H. E. Kennedy and H. Mac Vandiviere, Gravelly Sanatorium, Chapel Hill.

2. Quantitative determination of virulence of Mycobacteria. Margaret R. Vandiviere and H. Mac Vandiviere, Gravelly Sanatorium, Chapel Hill.

3. Lethal and hemolytic properties of extracts of group A streptococcal cells. Edward Sharpless and John Schwab, Dept. of Bacteriology, University of North Carolina School of Medicine, Chapel Hill.

5. The synthesis of purines by purine-requiring mutant of *Escherichia coli*. Samuel H. Love, Dept. of Microbiology, Bowman Gray School of Medicine, Winston-Salem.

6. Reiter spirochete complement-fixation test. George Cannefax, Venereal Disease Experimental

Laboratory, U. S. Public Health Service, Chapel Hill.

Dr. Harriette D. Vera of Baltimore Biological Laboratory, Baltimore, Maryland, spoke at the dinner meeting on "Isolation of Streptococci."

Northeast Branch (Alice T. Marston,
Secretary-Treasurer)

April 12, 1957. The Branch met at Harvard Medical School to hear the following program in the afternoon.

1. Highlights of sixteen years of Salmonella recoveries in Massachusetts. Robert A. MacCreedy, Asst. Director, Diagnostic Laboratories, Mass. Dept. of Public Health, James P. Reardon, Epidemiologist, Division of Communicable Diseases, Mass. Dept. of Public Health, and Ivan Saphra, Bacteriologist, The New York Salmonella Center, Beth Israel Hospital, New York.

2. Further studies of Eastern Equine Encephalitis in Massachusetts. Roy Feemster, Director, Division of Communicable Diseases, Mass. Dept. of Public Health.

3. Comparative results of guinea pig inoculation and cultures in the diagnosis of tuberculosis. M. A. Derow and L. Ravreby, Norfolk County Hospital, Braintree and Boston University School of Medicine.

4. Fluorescence of the Azotobacter. Donald B. Johnstone, University of Vermont.

The speaker at the dinner meeting was Professor William H. Weston, Emeritus Professor of Cryptogamic Botany at Harvard University. His subject was "The Pathogenic Fungi and their Relation to the Bacteriologist."

Ohio Branch (Rosemary Bole, Secretary-
Treasurer)

April 6, 1957. The Spring meeting of the Ohio Branch was held at the Robert A. Taft Sanitary Engineering Center in Cincinnati. After a welcome by Harry G. Hanson, Director of the Center, the members heard the following papers:

1. A rapid test for detecting coagulase positive staphylococci in food. Elizabeth Wilson, Milton J. Foter and Keith H. Lewis, Robert A. Taft Sanitary Engineering Center, Cincinnati.

2. Hemagglutination in Cat-Scratch Fever. C. D. Graber, M. C. Dodd, G. Anderson and F. H. Wentworth, Department of Bacteriology, Ohio State University and Ohio Department of Health, Columbus.

3. Isolation and identification of *Cryptococcus neoformans* from pigeon nests. C. J. Kao and J. Schwarz, The Jewish Hospital, Cincinnati.

4. The effect of temperature and humidity on the nasal flora of white Swiss mice. N. Rapoza and J. M. Birkeland, Department of Bacteriology, Ohio State University, Columbus.

5. The development of antibiotic resistance in cheese starter cultures. K. M. Shahani and W. J. Harper, Departments of Dairy Technology and Bacteriology, Ohio State University, Columbus.

6. Tropical disease problems in Central America. Joseph G. Tully, Department of microbiology, University of Cincinnati, College of Medicine.

7. Plant disease fungi in sewage polluted water. Wm. B. Cooke, Robert A. Taft Sanitary Engineering Center, Cincinnati.

8. The identification of *Proteus* species by bacteriophage typing. Peter Pattee and Jack N. Baldwin, Department of Bacteriology, Ohio State University, Columbus.

9. Food supply and bacterial growth on agar plates. James V. Lawrence, Department of Zoology, Ohio University, Athens.

10. An evaluation of the measurement of zones in routine antibiotic sensitivity tests. E. O. Hill, J. M. Bulmash and W. A. Altemeier, College of Medicine, University of Cincinnati and Cincinnati General Hospital.

Eastern Pennsylvania Branch (T. G.
Anderson, Secretary-Treasurer)

March 16, 1957. The Branch's 262nd Meeting was held at the University of Pennsylvania Medical School.

1. Synchronization of division in cultures of *E. coli*. Dwight B. McNair Scott, Department of Physiology, School of Medicine, University of Pennsylvania.

2. Prodigiosin biosynthesis in *Serratia marcescens*. Ursula Santer, Department of Microbiology, Yale University School of Medicine.

3. Production of receptor-destroying enzyme by *Vibrio cholera*. William Feldman, Langbord Virus Laboratory, Department of Microbiology, Hahnemann Medical College.

April 23, 1957. The program at the 263rd meeting consisted of a panel discussion on "The Combined use of Antibiotic Agents." Amadeo Bondi, Jr., Hahnemann Medical College, was moderator. Panel members were Gladys L. Hobby, Charles Pfizer and Co., Harrison F. Flippin, University of Pennsylvania, Earle H. Spaulding, Temple University, and Robert I. Wise, Jefferson Medical College.

May 21, 1957. The 264th Meeting was also held at the University of Pennsylvania.

1. Immunization in Brucellosis. Israel Live, V.M.D., Ph.D., School of Veterinary Medicine, University of Pennsylvania.

2. Dermatomycosis in Animals Transmissible to Humans. Frank Kral, D.V.M., School of Veterinary Medicine, University of Pennsylvania.

3. Viremia and Neutralizing Antibodies in Canine Distemper. Gunnar Rockborn, D.V.M., School of Veterinary Medicine, University of Pennsylvania.

Rio de Janeiro Branch (Laerte de Andrade,
Secretary-Treasurer)

February 19, 1957. The meeting was held at the Brazilian Press Association Building. The scientific session consisted of the following papers:

1. Urease activity in *Mycobacterium*. I. Preferable method for quantitative determination. Laerte de Andrade, Instituto de Microbiologia da Universidade do Brazil.
2. Bacterioimpedience (bacteriostasis) of stains of *Listeria*. Genesio Pacheco and Maria de Lourdes Santo, Instituto Oswaldo Cruz, Brasil.
3. Studies on *Streptococci*. I. Preliminary experience on the relative efficiency of some techniques for the isolation of streptococci. II. Some technical details on anaerobiosis with reference to the facultative anaerobic streptococci. III. Bacteriologic fundamentals for the isolation of streptococci from nose and throat exudates. Carlos Solé Vernin, Instituto de Microbiologia da Universidade do Brasil.

South Central Branch (R. J. Strawinski,
Secretary-Treasurer)

December 8, 1956. This meeting was held at the Tulane University School of Medicine.

1. Synnematin B in the Treatment of Experimental Salmonella Infections in Chicks. Joan F. Bridges, D. I. Clemmer, and M. F. Shaffer, Department of Microbiology, Tulane University.
2. Observations on Natural Poliovirus Infections in Immunized Children. H. M. Gelfand, John P. Fox and D. R. LeBlanc, Section of Epidemiology, Department of Tropical Medicine and Public Health, Tulane University.
3. Listeriosis. A Report of Eleven Cases seen at Charity Hospital. Marion Hood, Department of Pathology, Charity Hospital of Louisiana.
4. Fifty FDA Years—With an Account on Drug Bacteriology. James B. Hyndman, Pure Food and Drug Administration, Department of Health, Education and Welfare.
5. Studies on the Mode of Action of 2,4-dichlorophenoxyacetic acid on Some Bacteria. Emmett J. Johnson and Arthur R. Colmer, Department of Bacteriology, Louisiana State University.
6. Metabolism of Methane. Lewis R. Brown and R. J. Strawinski, Department of Botany, Bacteriology and Plant Pathology, Louisiana State University.
7. Virus-Vector Relationships in the North American Encephalitis. Roy Chamberlain and Morris Schaeffer, Virus and Rickettsia Section, C.D.C., U.S.P.H.S., Montgomery, Alabama.

May 18, 1957. The Branch met at Louisiana State University for an afternoon program.

1. Comparative in vitro antigenicity of intact cell and soluble *Brucella abortus* antigens. R. J. Bienvenu, Jr., and V. T. Schuhardt, Department

of Biology, Northwestern State College, Natchitoches, La., and Department of Bacteriology, University of Texas, Austin, Texas.

2. Chromatographic and spectrophotometric analysis of Sudan dyes. John F. Christman, Department of Agricultural Chemistry and Biochemistry, Louisiana State University, Baton Rouge, La.

3. Learning deficit in rats induced by West Nile and Murray Valley encephalitis viruses. Carl E. Duffy and O. D. Murphree, Department of Microbiology, University of Arkansas Medical Center, Little Rock, Ark., and Veterans Administration Hospital, North Little Rock, Ark.

4. The relation of magnesium ion to the inhibition of the respiration of *Azotobacter vinelandii* by aureomycin, achromycin and 2,4-dichlorophenoxyacetic acid. Emmett J. Johnson and Arthur R. Colmer, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

5. *Salmonella typhimurium* associated with swine enteritis. Harold L. Hurst, Department of Veterinary Science, Louisiana State University, Baton Rouge, La.

6. Studies on propane and butane utilization by a soil microorganism. E. N. Benes, L. R. Brown and R. J. Strawinski, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

7. The use of soil plaques to gauge the effects of some herbicides upon the fungal flora of mhoon soil. Neylan A. Vedros and Arthur R. Colmer, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

8. Studies on the aerobic carbohydrate metabolism of *L. mesenteroides*. Mary K. Johnson and C. S. McCleskey, Department of Bacteriology, Louisiana State University, Baton Rouge, La.

Southeastern Branch (Anne Louise Pates,
Secretary-Treasurer)

December 14, 1956. The 17th Annual Meeting was held at Gunter Air Force Base, Montgomery, Alabama.

1. Growth Pattern of Certain Strains of Mycobacteria in Hela Cells. C. C. Shepard, Special Projects Unit, U.S.P.H.S. Communicable Disease Center, Montgomery, Alabama.

2. A Comparison of the Complement Fixation and Hemagglutination-Inhibition Tests on Psittacosis-LGV Sera. Matthew A. Bucca, Special Projects Unit, Communicable Disease Center, Montgomery, Alabama.

3. Variation in Adaptability of Bacteria to Uronic Acids. William J. Payne, Department of Bacteriology, University of Georgia, Athens, Georgia.

4. Antigenicity of a Medium Factor in Combination with Streptococci. Elizabeth Conroy and

Helen Ashworth, USPHS Communicable Disease Center, Chamblee, Georgia.

5. Quantitative Study of Rabies in Nature. R. E. Kissling, Communicable Disease Center, Virus Laboratory, Montgomery, Alabama.

6. A Comparison of Brucella Antigens Isolated by Various Methods. John W. Foster, Department of Microbiology and Preventive Medicine, University of Georgia, Athens, Georgia.

7. Comparative Studies on the Decomposition of Cellulose by Mesophilic Aerobic Bacteria. Robert J. Ellis, Communicable Disease Center, Diagnostic Serology Unit, Chamblee, Georgia; Herbert W. Reuszer, Department of Botany and Plant Pathology, Purdue University, LaFayette, Indiana.

8. Some Properties of the Tumor Inducing Principle of the Crown-Gall Organism (*Agrobacterium tumefaciens*) in Plants. J.H.M. Henderson, Research Associate Professor (Plant Physiology), Tuskegee Institute, Alabama.

9. A Preliminary Report on the Antibacterial Activities of Two Alpha Beta-Unsaturated Ketones. C. M. Ford, E. G. Trigg and L. F. Cason, Tuskegee Institute, Alabama.

10. St. Louis Encephalitis Virus in Mosquitoes. Roy W. Chamberlain, Virus-Vector Research Unit, Communicable Disease Center, Montgomery, Alabama.

Colonel Fratis L. Duff, Commanding Officer, School of Aviation Medicine, Gunter Air Force Base, spoke to the membership at the banquet. His subject was "The Current Status and Future Problems of Immunization."

December 15, 1956. The program of the 18th Annual Meeting comprised a symposium on "Fluorescent Antibody Techniques." Margaret Green, University of Alabama, was Moderator.

7. Staining Bacterial Smears with Fluorescent Antibody. Max D. Moody, Special Research Unit, Communicable Disease Center, Chamblee, Georgia.

2. Problems of Specificity Encountered in Fluorescent Antibody Staining of *Escherichia coli*. Walter R. Dowdel, University of Alabama, Tuscaloosa, Alabama.

3. Problems which may be elucidated by the fluorescent antibody technique. C. C. Shepard, David F. Hersey, and Robert Goldwasser, Communicable Disease Center, Virus Laboratory, Montgomery, Alabama.

Texas Branch (Major Jose Rivera, Secretary-Treasurer)

March 29, 1957. The two-day spring meeting of the Texas Branch was held at the Faculty House in Galveston, Texas. Dr. Kenneth Burdon presided over the following program on Friday afternoon.

1. The use of hexadecanal as a carbon source by

certain bacterial species. H. K. Guthrie and Nelda Hinchley, North Texas State College, Denton.

2. Growth studies on the bacterial flora of emulsion oils. C. O. Tant and E. O. Bennett, University of Houston, Houston.

3. Effects of guinea pig serum on mouse leukemia. George Schlagenhauf, D. M. Morris and R. K. Guthrie, North Texas State College, Denton.

4. Inactivation of isotopically-labelled bacteriophage. Bro. John P. Donohoo, St. Mary's University, San Antonio.

5. Normal and abnormal human serum diffusion patterns in agar columns. William G. Glenn, USAF School of Aviation Medicine, Randolph Field.

6. Ribonucleic acid contamination of extracted bacterial deoxyribonucleic acid. Robert P. Williams and Davis Hawkins, Jr., Baylor Medical School, Houston.

7. Reduction of coliform bacteria in sewage sludge with chlorine and iodine. C. H. Connell, D. A. Dreyer and E. J. M. Berg, The University of Texas, Medical Branch, Galveston.

8. Comparative *in vitro* antigenicity of intact cell and soluble *Brucella abortus* antigens. R. J. Biennu, Jr., and V. T. Schuhardt, Northwestern State College, Natchitoches, La., and University of Texas, Austin.

9. Loss of photoreversal effects during sporulation. W. R. Romig and Orville Wyss, University of Texas, Austin.

10. A comparison of the antibiotic resistances of micrococci isolated from hospital patients and those isolated from students. Sanders T. Lyles, Texas Christian University, Fort Worth.

11. Study of an outbreak of staphylococcal infections using phage typing. Warren R. Stinebring, Joe A. Bass and R. Redmond, University of Texas, Medical Branch, Galveston.

12. Preliminary evaluation of an O-phenyl-phenol preparation as a hospital disinfectant. Francis G. Murry and E. Staten Wynne, University of Texas, M. D. Anderson Hospital and Tumor Institute, Houston.

13. The relationship between coagulase production and various biochemical properties of *Micrococcus pyogenes* var. *aureus* and *albus*. J. H. Marston and W. J. Fahlberg, Baylor Medical School, Houston.

14. Frequency of occurrence of various organisms in the anterior nares of a hospital population. Joe A. Bass, Warren R. Stinebring and Harriet M. Felton, University of Texas, Medical Branch, Galveston.

15. The effect of dextrose on the lysis of staphylococcus phage. A. Ruysenaars, University of Texas, Medical Branch, Galveston.

Dr. Cora Downs, Professor of Bacteriology at the University of Kansas, gave the Annual I. M. Lewis lecture at the dinner meeting held at the Faculty House Restaurant. Her address was

titled "The Rapid Diagnosis of Tularemia and Rickettsial Infections."

March 30, 1957. Dr. O. B. Williams presided at the Scientific Session held on Saturday morning.

16. Studies of *Tinea pedis* in medical students. I. Initial survey. Mildred J. Wagner and Etta Mae Macdonald, University of Texas, Medical Branch, Galveston.

17. Rat Thyroid antibodies: Localization and effect on basal metabolism of the injected rat. Ludwik Anigstein, G. W. Eklund and Dorothy Whitney, University of Texas, Medical Branch, Galveston.

18. Identification of feline pneumonitis virus in tissue culture by fluorescein labelled antibody. P. Donaldson and S. E. Sulkin, University of Texas, Medical Branch, Dallas.

19. The characteristics of the cytopathogenic effect of adenoviruses on tissue culture cells as revealed by time-lapse, phase contrast cinematography. Leonard Hayflick, University of Texas, Medical Branch, Galveston.

20. Growth of meningopneumonitis virus in normal and immune monocytes. A. A. Benedict and C. McFarland, University of Texas, Medical Branch, Galveston.

21. Some properties of the bat salivary gland virus. Alice Conklin, Texas State Department of Health, Austin.

22. Viral inactivation by heat labile serum factors, Rae Allen, R. A. Finkelstein, and S. E. Sulkin, University of Texas, Medical Branch, Dallas.

23. Passive hemagglutination method for detection of psittacosis antibody, E. S. O'Brien and A. A. Benedict, University of Texas, Medical Branch, Galveston.

24. Complement fixation with beta-propiolactose treated St. Louis encephalitis antigen. R. A. Finkelstein and S. E. Sulkin, University of Texas, Medical Branch, Dallas.

25. Complement fixation studies with murine hepatitis virus. Morris Pollard and Robert H. Russell, University of Texas, Medical Branch, Galveston.

26. Bronchial aspiration and urine studies in post poliomyelitis patients. W. Fahlberg, D. Packard, J. Mahoney, R. Jackson and W. Spencer, Baylor Medical School and Southwestern Poliomyelitis Respiratory Center, Houston.

Washington Branch (Howard Reynolds, Secretary-Treasurer)

March 26, 1957. Walter Reed Army Institute of Research was the site of the 215th Meeting of the Washington Branch.

1. Studies on the Diphtheroids, Morrison Rogosa, National Institute of Dental Research, National Institutes of Health.

2. Serological Studies on Staphylococcal Enterotoxin, Ezra P. Casman, Division of Microbiology, Food and Drug Administration.

3. A Family Outbreak of Histoplasmosis in Montgomery County, Maryland, Charlotte Campbell, Bacteriology Department, Walter Reed Army Institute of Research, Walter Reed Army Medical Center.

May 14, 1957. The 216th meeting also was held at Walter Reed Army Institute of Research.

1. The nutritional requirements of rumen bacteria. J. J. Gilroy and R. N. Doetsch, Department of Bacteriology, University of Maryland, College Park.

2. Interrelationships of amino acids in the nutrition of *Leuconostoc mesenteroides*, P. 60. Thomas P. O'Barr, Hilda Levin, and Howard Reynolds, Human Nutrition Research Division, ARS.

3. Plague toxin. Samuel J. Ajl, Department of Bacteriology, Walter Reed Army Institute of Research, Walter Reed Army Medical Center.

BOOKS AND REVIEWS

Microbial Ecology, (7th Symposium of The Society for General Microbiology.) R. E. O. Williams and C. C. Spicer, Editors, New York: Cambridge University Press, 1957. 388 pp., \$6.50.

Methods of Biochemical Analysis, Volume 4. David Glick, Editor, New York: Interscience Publishers, Inc., 362 pp., \$8.50.

Manual of Soil Fungi, J. C. Gilman, Ames, Iowa: Iowa State College Press. 450 pp., \$7.50.

Man Against Germs, A. L. Baron, E. P. Dutton & Co., Inc.: New York, 320 pp., \$4.50, 1957.

Immunology and Serology, Philip L. Carpenter, Philadelphia: W. B. Saunders Company, 1956, 351 pp., \$6.50.

Dairy Microbiology, E. M. Foster, F. E. Nelson, M. L. Speck, R. N. Doetsch, and J. C. Olson, Jr. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1957, 492 pp., \$7.50.

Modern Methods of Microscopy, A. E. J. Vickers, Editor, London: Butterworth Scientific Publications, 1956, (Distributed by Interscience Publishers, Inc., New York, N. Y.), 114 pp., \$3.50.

This book is a reprinted collection of a series of papers from the journal *Research*. The authors are British specialists. The exposition is concise but technical. Principles are presented, instrumentation, the advantages and limitations of each method of microscopy, and something is said of present and future biological applications. Resolution and contrast, two factors of cardinal importance to microbiologists, are well discussed. The topics presented are: the electron microscope, development and application of reflecting microscopes, fluorescent microscopy, numerical values and quantitative determinations, surface microinterferometry, metallurgical aspects of microscopy, phase contrast microscopy, microscopic interferometry, the flying spot microscope, x-ray microscopy, the polarizing microscope in organic chemistry and biology. A bibliography follows each chapter.

In an introductory chapter entitled *Modern Microscopy*, the editor, A. E. J. Vickers, permits himself some very useful crystal gazing, of which the following are noteworthy examples:

"Some extraordinary and exciting work is available to the user of the new reflection objectives (reflecting microscopes). Observation can be made of a living cell in the visible part of the spectrum, photographs may be taken of the same cell while alive in the ultraviolet, visible and infra-red parts of the spectrum, a spectrophotometer can then be attached to the microscope, and absorption spectra of the contents of the cell can be studied in the ultraviolet, visible and infra-red regions with the cell still alive. Thus knowledge of the chemical changes within the cell can be obtained while it is alive and under observation on the microscope stage. These new methods are yielding valuable information on both normal and pathological growth.

* * *

"The interference microscope thus permits both observation and measurement of the various phase changes produced by transparent objects and this alone is extremely valuable. It can give information on such subjects as double refraction of material, the protein content of a living cell or its solid to water ratio. The papers of M. M. Swann, J. M. Mitchison, A. F. Hughes and others of the Cambridge School have shown how useful this quantitative aspect of microscopy can be in biological studies.

* * *

"The use of the polarizing microscope has advanced knowledge of the structure of biological objects to a very great degree; especially has this occurred in the study of subjects such as skeletal muscle, the structure of protein molecules and the direction in which long protein molecules arrange themselves when the muscle is subject to various kinds of reaction. Polarized light optics permits

the student to investigate the special microscopic structural characteristics and orientation of various cells and tissues. It may be used qualitatively to detect the presence or oriented structure in a biological system, but it has many quantitative applications which have been developed in recent years and which are leading to an exact knowledge of the chemistry of the living cell."

Those who want to consider the emerging possibilities of recent instruments and methods in microscopy will find this a very helpful little volume.

STUART MUDD

A Practical Manual of Medical and Biological Staining Techniques, 2nd Edition, Edward Gurr, New York: Interscience Publishers, Inc., 1956, 451 pp., \$6.50.

This manual is a compilation of a large number of staining methods concisely described. The book is divided into the following sections: animal histology, botanical methods, fluorescent microscopy, histochemical methods and smear preparation. The appendix contains several pages of common solutions and reagents. An index in front of the book contains helpful recommendations of specific stains for definite purposes. Different methods of fixation in common usage are briefly described with remarks concerning preferable methods of fixation for specific stains. Precautions concerning deterioration of tissues during fixation are recommended when necessary. The section on stains for animal tissue includes most of the useful stains currently in use. Stains utilized for demonstrating mitochondria, nucleoli and chromosomes are given under cytological methods. Histochemistry is restricted to methods for the demonstration of lipids, ribonuclease and sites of carbonyl activity. The section of smear preparations will be useful for bacteriologists and of some help to others interested in staining tissue cultures. The majority of methods in this manual are contained in other texts on staining. Recently recommended stains, however, have also been included by the author along with specific references. What recommends this text is the wide spectrum of stains compiled in one book which will be useful to workers in widely separate fields of interest.

JOSEPH J. LALICH, M. D.

Dictionary of Microbiology, M. B. Jacobs, M. J. Gerstein, and W. G. Walter, Princeton, New Jersey: D. van Nostrand Co., Inc., 1957, 276 pp., \$6.75.

It is perhaps symptomatic of our scientific culture that certain areas (or subdivisions of areas) advance so rapidly that investigators from even closely allied fields find that the language and definitions of these rapidly moving sciences are quite alien to them. In an apparent effort to alleviate the situation there have appeared recently a perfect plethora of dictionaries of chemistry,

antibiotic and other technological areas of greater or lesser degree of specialization. A particularly intriguing instance is the recent appearance of a five language (Czechoslovakian, Russian, German, English, and French) dictionary covering "technical expressions in the fields of paints, lacquers, and varnishes, surface treatment and corrosion.")

Under consideration here is a volume purporting to provide, the dust jacket reveals, "clear and explicit definitions of many thousands of terms from the entire field of microbiology". No argument can be made with the claim that there are thousands of terms involved in the dictionary. Inspection, however, reveals that "clear and explicit" is somewhat of an overstatement and the laudable aim on the dust jacket is not quite realized in the text.

Random selections of words revealed some very interesting things. For example, *Fermentation* is (somewhat ungrammatically) defined as "A form of respiration of plants which requires none or little free oxygen yielding alcohol and carbon dioxide as the end products and releasing only a part of the energy of the food used. Specifically, the conversion of sugars, and sugars derived from starch, into ethyl alcohol by enzymes of yeast. Generally the conversion of organic substances into simpler substances by the action of enzymes produced by living organisms".

Photolithotrophy, the user is told, is "Growth of microorganisms dependent upon exogenous inorganic hydrogen donors". *Photoorganotrophy* is "Growth of microorganisms dependent upon exogenous organic hydrogen donors". *Bacteria, autotrophic* become "Bacteria able to obtain energy from inorganic sources of nitrogen and carbon, or in some instances from sunlight".

The symbol G is defined as "Symbol for filterable stage of bacteria. Abbreviation for generation time and for G colonies". No mention is made of the fact that G is also used as the symbol for thermodynamic potential as well as for the Newtonian constant of gravitation. No useful cause will be served by extending this list.

In addition to providing misleading definitions the dictionary suffers from a lack of etymological information and a somewhat restricted choice of terms defined. As examples of the latter the following were not found: *casein*, *collagen*, *collagenase*, *purine*, *pyrimidine*, *auxotroph* (a *prototroph*, incidentally is, "A mutant which regains the ability to grow in media not containing a growth factor"), *simultaneous adaptation*, *sequential induction* and many others. There appears to be a certain amount of poor organization which leaves the user at least mildly frustrated. For instance, a user looking up *Darwinian mutation* is told to "See *Neodarwinian mutation*" which, when accomplished, directs the reader to "See *Mutation*,

neodarwinian". Under *Mutation*, *Neodarwinian* (mirable dictu!) the definition is found.

In general, the student and newcomer to microbiology would do better to confine his search for definitions (if he must have them) to standard texts, Bergey's Manual and discussions with colleagues versed in the field. This may, however, be a judgment passed by one unqualified to do so—microbiology being defined in the Dictionary of Microbiology as "The science of unicellular organisms that considers bacteria, yeasts and molds. That division which considers unicellular animals is known as protozoology. The various branches are termed agricultural, dairy, food, industrial, medical and sanitary microbiology". The reviewer, to his chagrin, finds he is a microbiologist without definition!

R. E. KALLIO

Laboratory Manual for Dairy Microbiology, Revised Edition, E. M. Foster and W. C. Frazier, Minneapolis, Minnesota: Burgess Publishing Co., 1957, 62 pp. \$2.50.

The revision of the 1953 edition of this manual has not materially altered its format or content. Its useful arrangement of exercises remains: Study of Milk Microorganisms (13 exercises), Methods Used in the Control of Milk Quality (7 exercises), and Microbiology of Dairy Products (9 exercises). The only material modifications appear in the up-dating of standard methods for the direct count of milk, and in the resazurin test, plus the addition of the "Fermentation Test" for fresh milk quality. Minor changes elsewhere indicate that each exercise has been scrutinized for accuracy and workability.

It is probably not coincidental that the exercises follow quite closely the subject arrangement of the text, "Dairy Microbiology," by Foster *et al.* This new, modern and well-designed text is used as a reference throughout the manual.

The exercises cover reasonably well the more important aspects of microbiology directly related to preparation, spoilage, and quality control of dairy products. It is particularly adapted to instruction of students in the dairy field or bacteriological control rather than in general bacteriology; however, the exercises on separate species of bacteria, yeasts and molds, and on standard methods are well-designed for the latter purpose also.

Since no critique is complete without pointing out weaknesses, it may be noted that little or no attention is devoted to primary isolation of bacteria, nor to re-isolation nor selection of colonies from starter cultures, etc. In context with modern concepts of variation and mutation, and in reflection upon methods of continuous, frequent transfer of such cultures, some experience in refreshing the activity of biochemically important

bacteria seems justified for a student being trained professionally. It may also be noted that minimal attention is given to the mundane matter of explicit, detailed directions on preparation of dilutions, use of pipettes, and similar techniques where proficiency is important and can be fortified by clear exposition of principles, and by extensive practice.

It is the reviewer's opinion that this manual is the most useful and adaptable in its field. It is so arranged that it may be adapted to needs of classes whose students have varied interests, particularly if accompanied by the text cited in it (see above).

M. E. TYLER

Laboratory Manual for Food Microbiology, Revised Edition. W. C. Frazier and E. M. Foster,

Minneapolis, Minnesota: Burgess Publishing Co., 1957, 78 pp. \$2.50.

This is a revised edition of the manual by the same authors. One experiment has been added to the section on preservation, and several other experiments have been revised slightly. The appendix has been expanded to include tentative standards for bottlers' and liquid sugar.

The 49 experiments, divided into six sections, provide a wide range of determinative, demonstrative, and analytical procedures. Each experiment concluded with a few select references and thought-provoking questions, and the flexibility of the contents render the manual readily adaptable to undergraduate as well as to graduate level classes.

J. ORVIN MUNDT

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NOVEMBER NEWS DEADLINE

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